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LAND DEVELOPMENT PLAN LEE COUNTY, NORTH CAROLINA

ABSTRACT

TITLE Land Development Plan, Lee County, North Carolina, June, 1977

AUTHOR North Carolina Department of Natural and Economic Resources, Division of Community Assistance, Local Planning and Management Services Section, Cleveland Byrdsong, Jr.

SUBJECT Land Development Plan

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ABSTRACT. This Land Development Plan is an update of a Land Development Plan which was prepared for Lee County in 1968. In general, this plan focuses on goals, objectives, standards, policies, programs, evaluation criteria and growth policies, for the County of Lee.

The preparation of this report was financed in part through a comprehensive planning grant from the Department of Natural and Economic Resources of the State of North Carolina.

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Acknowledgement

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Also, Ray Green of Triangle J Council Governments provided Technical assistance in preparing this report.

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I. Introduction,, Purpose and Methodology

In June, 1968, the Lee County Planning Board with the assistance of the Department of Conservation and Development, Division of Community Planning prepared a Land Development Plan for Lee County. The two (2) previous studies that preceded the Land Development Plan were Potential For Development and the Community Facilities Plan/Public Improvement Program. During the interim period of 1966 (Lee County's initial planning year) to 1976, many external and internal changes have taken place that involve coordination between local, Regional, State and Federal levels of government. Examples of those changes are as follows:

1. Creation of seventeen (17) Lead Regional Organizations throughout North Carolina for regional governmental planning purposes;
2. Creation of seven (7) North Carolina field offices for local governmental planning and management purposes;
3. Establishment of federal revenue sharing for local governments; and
4. Establishment of a Land Policy Council which was given authority by the North Carolina General Assembly to develop a Land Classification System geared for local governments to establish policies and regulations for orderly growth.

In addition, it has been MANDATED by the United States Department of Housing and Urban Development (HUD) that local units of government adequately develop a land use element by August 22, 1977. This is a prerequisite for receiving

future 701 Comprehensive Planning Grants under the Housing Act of 1954, as amended. Presently, the Department of Natural and Economic Resources, Division of Community Assistance/Local Planning and Management Services Section is assisting the Lee County Planning Board with updating the 1968 Land Development Plan to meet the requirements of the HUD mandate and to use the Land Classification System.

Therefore, the Land Development Plan Update is programmed to satisfy the 701 Regulations, 600.72 (b)(1) through (b)(4) and will have primary emphasis on goals, growth policies, implementation tools and coordination mechanisms for Lee County. Furthermore, this Land Development Plan Update focuses on:

1. Long and short term policies with reference to where growth should and should not take place;
2. Type, intensity and timing of growth;
3. Studies, criteria, standards for effectively guiding and controlling major decisions as to where growth shall and shall not take place and
4. Policies, procedures, tools and mechanisms for coordinating and complementing local, areawide and state land use policies.

Hence, this Land Development Plan Update is to be endorsed by the Lee County Planning Board and recommended to the governing body for adoption as official county policy.

Public participation is an important tool for the local governmental planning process. It grants those who are affected by local governmental activities an opportunity give input and influence the decision-making process. The Planning Board has done the following in the preparation of this updated plan.

1. Reviewed and studied previous land use documents prepared for Lee County;
2. Conducted a detailed land use survey for the purpose of determining housing conditions (sound, deteriorating and dilapidated), location, type and amount of land uses;
3. Prepared background material for the purpose of analyzing land use patterns based on the land use survey and discussions with County Officials;
4. Updated Lee County's base maps based on the land use survey;
5. Researched and analyzed past population and land use trends for the purpose of making projections for the same; and
6. Prepared materials for conducting public participation meetings with emphasis on past land uses, existing land uses and future land use needs with reference to goals and policies.

II. History

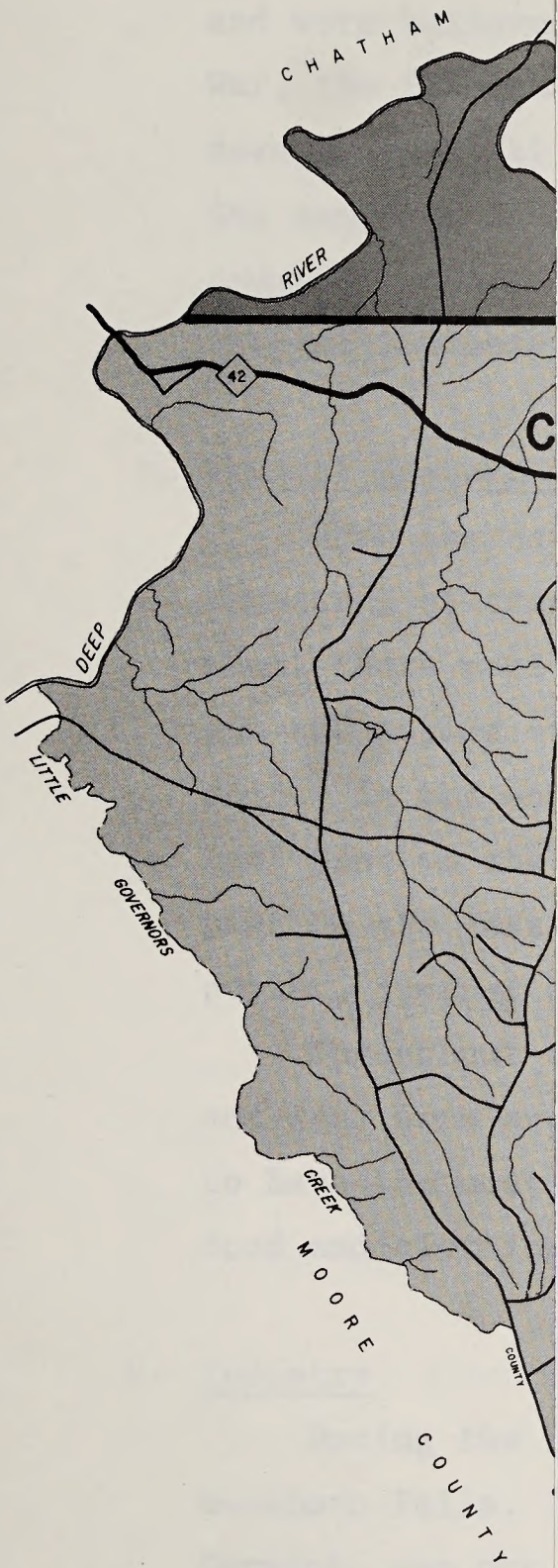
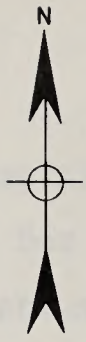
A. Settlement

The history of Lee County does not indicate the time nor place the first European viewed what is now known as Lee County. It is not known whether it was an explorer, a party of hunters or a party of Scots seeking new homes during the 1730's or 1740's.

Nevertheless, a party of men reached the Eastern bank of the Cape Fear River in May of 1745 in the vicinity where the present Harnett-Chatham line crosses the river. It was the responsibility of the men to accurately survey a line from Bath, on the coast to Salisbury, in the west. This line became known as the Granville Line which separates the land holdings of Lord Granville, north of the Line from land holdings of the Crown, south of the Granville Line. Within what is now known as Lee County, the Granville line crosses the Cape Fear River just below Buckhorn, passing about a mile north of Sanford, through Carbonton and westward near Salisbury. The line later became the south boundary of Orange County and the northern boundary of Cumberland County. In 1784, Moore County was formed and this line was the boundary between Moore and Chatham, which was formed from Orange County in 1770.

Unfortunately, the Granville project was dismantled because several of the men had to return to their families and plant crops but they did indicate to the surveyor that they would return during the Fall to complete the project. Fortunately, the men did return the following Fall and the Granville line was surveyed up to the vicinity of Salisbury.¹ (See Map for early settlement).

¹The Sanford History, By the Railroad House, Historical Association; 1974.



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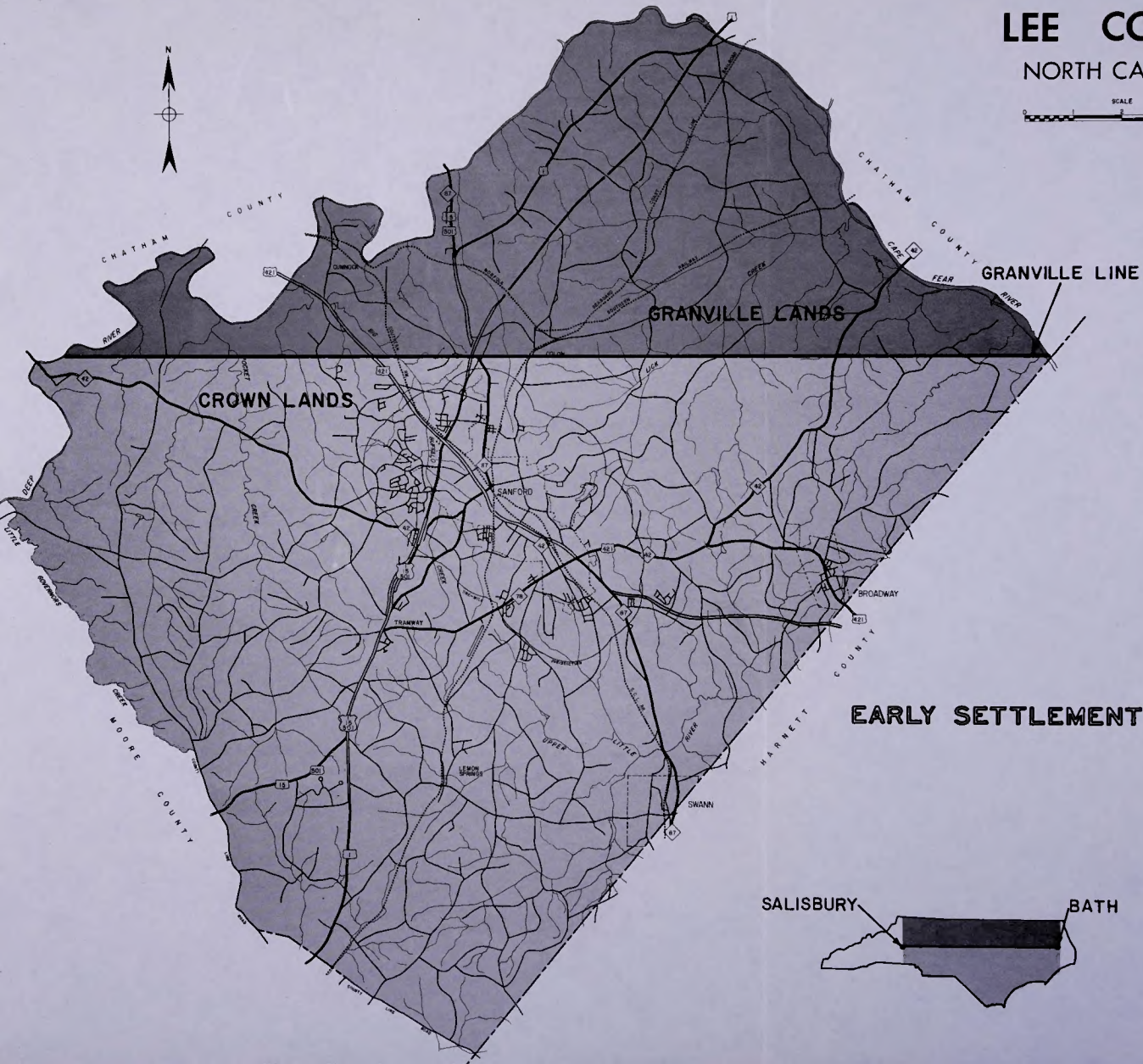
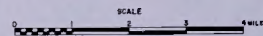
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¹The Sanford History, By the Railroad House, Historical Association; 1974.

LEE COUNTY

NORTH CAROLINA



EARLY SETTLEMENT

SALISBURY

BATH



During the early years of settlement, there were rare occasions for homes to be established on the hills. Much of the settlement occurred on the fertile lowgrounds near larger streams and where spring water was available. The early Cape Fear settlers were predominantly Welsh and English and were believed to be Quakers. Prior to the Revolutionary War, the floodtide of Highland Scots began to settle and develop the hill lands because the prime low lands were taken. The settlers located near Crain's Creek area north of Cameron, Jonesboro, Lemon Springs, and Broadway. In general, they located southeast of Sanford.²

B. Natural Resources

When the early settlers arrived, this area had an abundance of trees and game. In the northern half of the area, there were untouched forests of hickory, ashe, oak, gum and poplar with a mixture of pitch, loblolly and rosemary pine. In the southern half, there was an abundance of long leaf pine on the sandy ridges, along with loblolly and yellow pine on the less sandy soils. In the low regions grew gum, poplar, juniper and oak along with a mixture of other hardwoods.

Throughout the area, there were enormous flocks of turkey, and deer were overwhelmingly plentiful. Deer, however, seemed to have the most beneficial impact, being both a source of food and clothing for the early settlers.³

C. Industry

During the 1840's, coal deposits were discovered above the Buckhorn Falls. In 1855, the Egypt coal mine, located at Cummock, was put in commercial operation and supplied the

²The Sanford Herald, Bicentennial Edition; May, 1976.

³The Sanford History, By The Railroad House Historical Association; 1974.

Confederacy during the Civil War. At the same time, iron ore was discovered in the Buckhorn area and two blast furnaces were constructed to accommodate the needs of the Confederacy. One blast furnace was located just beyond the Chatham County line in Harnett County on the east bank of the Cape Fear River. The other furnace was located two (2) miles east of Cummock on the south bank of the Deep River. Both furnaces went into operation in 1862 but closed at the end of the Civil War.

However, in 1870, George G. Lobdell of Delaware came to this area to regenerate the iron ore operations for personal gains. He organized the Cape Fear River and Steel Company and began to mine the precious ore until he came upon a wall of rock which ultimately ended his industrial dream.⁴

D. Early Transportation and Development

During early settlement, roads were narrow trails only allowing the passage of two wheel carts and in many instances, the roads led to nowhere. However, there were two (2) roads that did traverse Lee County; namely, the Old Pee Dee Road and Shepherd Road.

The Pee Dee Road started at Braswell Ferry (Avent's Bridge) on the Cape Fear River and led southward to Cheraw, South Carolina.

The Shepherd Road started at Ramsey's Mill on the Deep River and ran southeastward to Cross Creek. The Shepherd Road carried traffic between Hillsborough and the Cape Fear settlements at Cross Creek and Wilmington.⁵

As early as 1830, there was an attempt to provide a system of locks on the Deep River and upper Cape Fear River for the purpose of making the rivers navigable for small boats. However, the lock system was inadequately designed and therefore abandoned.

⁴Lee County, N. C., Potential For Development, December, 1967.

⁵The Sanford Herald, Bicentennial Edition, May, 1976.

Later, a navigation company was organized to undertake the aforementioned project. During the interim period of 1850 to 1858, the navigation company built a system of locks from Buckhorn on the Cape Fear to the present Lockville plant site on the Deep River. Hence, navigation on the rivers became a reality.⁶

The railroads enhanced transportation and development in Lee County. During the initial phases of the Civil War, the railroad was established and ran from Fayetteville to Wilmington, having Jonesboro as its terminus. Later on during the Civil War, the railroad was extended to Cummock and after the Civil War, it was extended to Raleigh (presently known as the Seaboard Coast Line) near Jonesboro's railroad crossing, the town of Sanford was born. Sanford was named in honor of C. O. Sanford, Chief Engineer of the Raleigh Augusta Air Line. The town was incorporated in 1874. There were other communities that developed because of the railroads, and are as follows: Broadway, Swann, Colon, Lemon Springs, and Rosser. Due to Sanford's economic prosperity and expansion, Jonesboro and Sanford consolidated in 1947.

The only other incorporated town in Lee County is Broadway. However, there are several other rural communities and are as follows: Lemon Springs, Green Gables, Swann, Osgood, Deep River, Colon, Blacknell, Cummock, and New Hope. On the outskirts of Sanford, there are two developed areas - Tramway located southwest of Sanford and Northview located near Highway 1, north.⁷

⁶ Lee County, N. C., Potential For Development, December, 1967.

⁷ Ibid.

E. Summary

Lee County, fashioned from parts of Moore and Chatham Counties on February 16, 1907, received its name from General Robert E. Lee and was the 98th County to be formed in North Carolina. The County's initial offices were located over Brown's Auto Supply which is now Carter's Furniture Company. One year later, (1908) the County's initial court was held in the old Opera House in the Page and Trust Company building.⁸

It should be recognized that the largest coal deposits in North Carolina are found in Lee County. During the early years of settlement, extracts from the once plentiful pine trees supplied many states with tar, pitch and turpentine. Lee County is noted for its valuable shale (clay) deposits and is one of the Nation's largest brick producing centers. The County's central geographic location further enhances the probability of becoming a major trade center, especially with a railroad transportation system that includes: Seaboard, Atlantic Coast Line, Southern, the Atlantic-Western and Norfolk-Southern Railroad. Furthermore, U. S. Highway 1, which extends from Maine to Florida passes through Lee County. Also, the County is complemented with a network of major and secondary roads that extend to and from other cities.⁹

⁸ The Sanford Herald, Bicentennial Edition, May, 1976.

⁹ IBID

III. Regional Setting

A. General Location and Highway Distances

Lee County is geographically located in the center of the State of North Carolina. The County is bounded on the west by parts of Moore and Chatham Counties, Little Governors Creek and the Deep River; on the south by parts of Moore and Harnett Counties; on the east by Harnett County; on the north by Chatham County, parts of the Deep River and Cape Fear River.

There are two (2) incorporated towns in the County. Sanford, the County Seat, is located in the center of the County and is approximately forty-four (44) miles southwest of Raleigh (the State Capital); forty-six (46) miles south of Durham; eighteen (18) miles south of Pittsboro; forty-six (46) miles southeast of Asheboro; eighteen (18) miles northeast of Carthage; thirty-four (34) miles northwest of Fayetteville and twenty-three (23) miles east of Lillington. All of the aforementioned cities or towns are located within a fifty (50) mile radius of Sanford. The only other incorporated town is Broadway which is located southeast of Sanford. (See Map 2 for Regional location).

B. Regional Location and Population Trends

Lee County is located in the southern section of Region J. Region J is one of seventeen (17) multi-county planning regions in North Carolina and is located in the Central Piedmont section of North Carolina. The Region comprises six (6) Counties and thirty (31) cities or towns with the highest County population being Wake County (229,006), the lowest being Chatham County (29,554) and Lee County has the second lowest population (30,467).¹⁰

¹⁰U. S. Bureau of Census, Population Characteristics, 1970

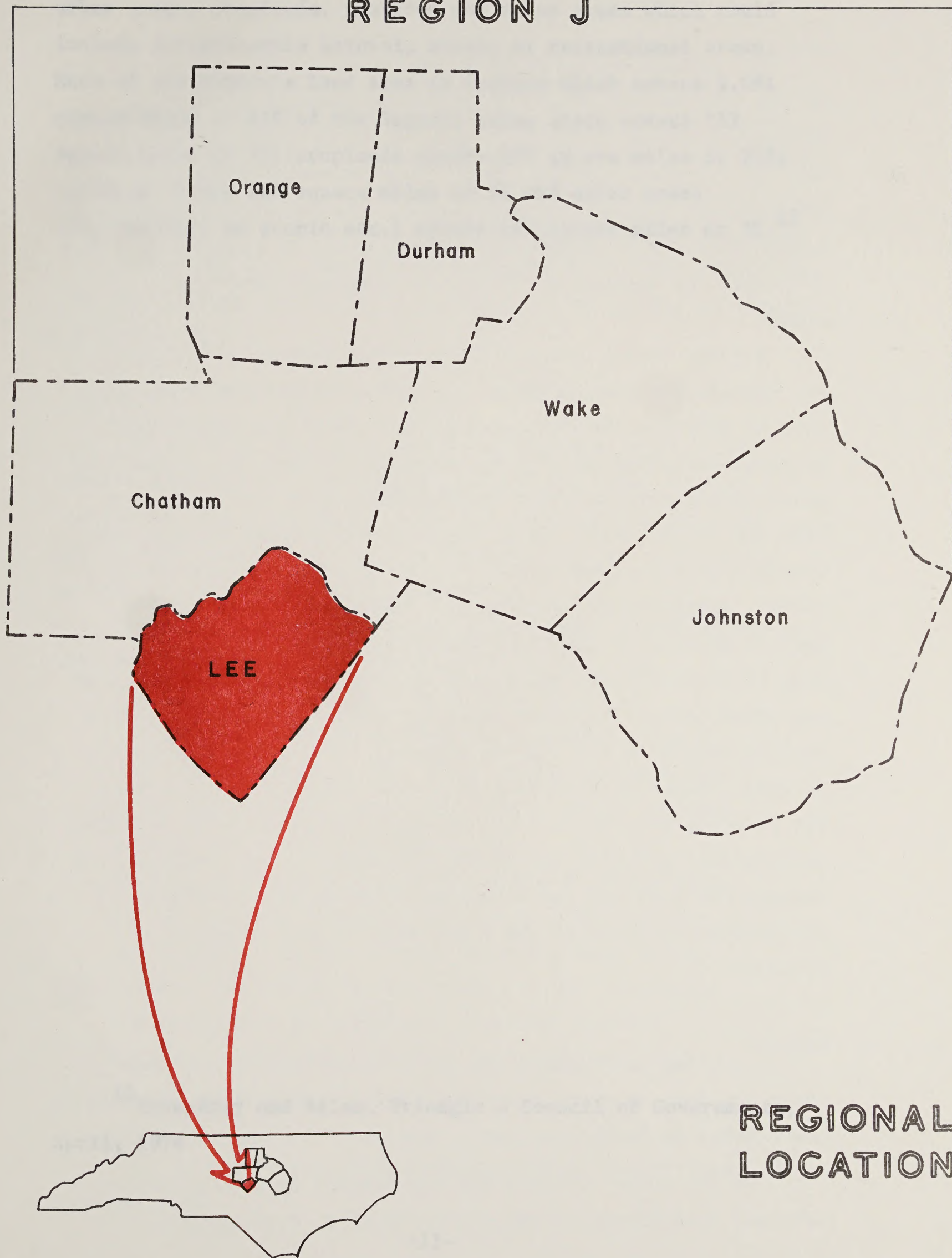
The 1970 Census, Population Characteristics indicate that there are 541,012 persons living in Region J. Population projections provided by Region J and North Carolina Department of Natural and Economic Resources (July; 1976) indicates a Regional population of 606,700 in 1975 which is a 12.14% increase since 1970, 660,400 persons by 1980 or 8.85% increase since 1975.

In comparing Region J consisting of six (6) counties and thirty-one (31) cities or towns with Region F consisting of eight (8) Counties and fifty-five (55) cities or towns, it was discovered that Region J's population will increase 21% between 1970 and 1980 and Region F will increase 19% between 1970 and 1980. Therefore, it is evident that Region J (a smaller region) comprises less counties and cities or towns but will grow slightly more than Region F.¹¹ This is possibly due to Region J's ability to attract industry thus warranting an influx of people into the Region. It should be recognized that Lee County adds a plus with reference to attracting industry into Region J. To further substantiate Lee County's capability to attract industry, the Sanford Herald (September, 1976) published the following unemployment figures: in February, 1976 it was 7.6 per cent; in March 6.7 per cent; in April 5.9 per cent; in May 5.2 per cent and in June, 1976, it was 5 per cent. Again industry, creator of new wealth, is a major reason why Lee County today ranks second among the 100 Counties in North Carolina in per capita income, which increased 93 per cent in the three years from 1970 to 1973.

The land area in Region J comprises 3,320 square miles and Lee County represents 7.57% of that total and has the smallest land area (255 square miles) in Region J. The

¹¹ Housing Market Analysis, Centralina Council of Governments, June, 1973

REGION J



REGIONAL
LOCATION

Region's general land use analysis comprises: forests, urban areas, croplands, pastures and other areas which could include irreplaceable natural, scenic or recreational areas. Much of the Region's land area is forests which covers 2,091 square miles or 63% of the Region; urban areas covers 232 square miles or 7%; croplands covers 697 square miles or 21%; pastures covers 200 square miles or 6% and other areas (recreational or scenic etc.) covers 100 square miles or 3%.¹²

¹²Inventory and Atlas, Triangle J Council of Governments, April, 1974

IV. Natural Features

The natural features of an area reflect the characteristics of the land in that area. Some of the elements include inventorying and/or identifying the soils, subsoils, climate, natural drainage, geology, etc. These elements influence the type and location of development. Therefore, precautionary measures should be taken into consideration to plan for the most efficient and economical pattern of growth by avoiding problem areas.

Natural features are changed by development and many of the changes are irreversible. Conservation programs have done much to preserve the soils, water, and plant and animal life. Although the planning program is concerned with the traditional conservation programs, its primary concern is the long range best use of the land. Thus, the planning program is more concerned with the preservation of land for its best use, be it forest, agricultural, residential, commercial or industrial. Land of particular qualities especially suited for certain uses is often limited and should be preserved for that use like any other natural resource which is limited in quantity. Once land is developed for a given purpose, it is often difficult to make changes or to return it to its original state. Thus, the planning program is concerned with the planning of orderly development, matching the natural features of the land with the demands for land and the resources found in it. Knowledge of the natural features is the first step in this planning process.

A. Climate¹³

According to "Climate and Air Quality" by Richard Kopec, there are four geographical features that assist with determining the climate in North Carolina. They are: latitude; altitude;

¹³N. C. Atlas, Climate and Air Quality by Richard Kopec, 1975 and Soil Survey of Lee County by S. O. Perkins, 1933.

proximity to the Gulf of Mexico; and North Carolina's positional location on the Continent. These features give Lee County a climate that is a big asset to manufacturing and agriculture. It permits uninterrupted production throughout the year, thereby lowering operating costs. Winters are short, summers are long and warm, but not oppressive. Precipitation varies from 42 to 53 inches annually. Mean annual temperature is 59.2 degrees F. and the altitude is 370 feet, latitude 35 degrees N. and longitude 79 degrees W.

B. Soils¹⁴

The soils in an area should be considered prior to any form of development. If precautions are not taken into consideration, the development costs may increase housing cost beyond most people's means. In essence, various soils are suited for certain types of development.

In rating the soils for agricultural use, including woodland and major hazards, certain criteria were used.

Crops were divided into three (3) divisions:

- (a) tobacco, planted wherever an allotment exists;
- (b) general crops - corn, small grain, soybeans and hays;
- (c) pasture - grass and clover and/or coastal bermuda grass and lespedeza sericea. Only one general rating is given in the tables. Irrigation, per se, was not considered -- either all with or all without. It was assumed that all lands would receive comparable fertilization, proper treatment and management in accordance with the hazard(s) involved. This would require technical assistance on the individual area involved.

¹⁴U. S. Department of Agriculture, Soil Conservation Service, 1971

Woodland rating was based on the following: Using adapted specie, dominat erosion/s, site index. 90-100, Good; 80-90, Fair; below 80, Poor.

In making interpretations for non-agricultural uses, limitations are expressed in degree. These are defined as:

SLIGHT: Soils have properties favorable for the rated use. Limitations are so minor that they can be easily overcome. Good performance and low maintenance can be expected from these soils.

MODERATE: Soils have properties unfavorable for the rated use. Limitations can be overcome or modified with planning, design, or special maintenance.

SEVERE: Soils have one or more properties unfavorable for the rated use. Limitations are difficult and costly to modify or overcome, requiring major soil reclamation, special design, or intensive maintenance.

Contained within this study is a General Soils Map of Lee County. Also, a table delineating the degree of limitation for soils and suitability.

A Soil Association consists of those soil series that make up the major portion of a specified area. Other series within the area are treated as inclusions. The inclusions are not listed by name and may or may not be accounted for in the Association. The sixty (60) soil series or land types recognized and mapped in the County have been grouped and recognized in the twelve (12) Soil Associations, either by name or as an inclusion and are as follows:

MAYODAN-CREEDMOOR

Gently sloping to moderately steep, well to moderately well drained upland soils, with a grayish-yellow to yellowish-red, yellowish-brown to multi-colored or red, friable to firm, sticky and very plastic, sandy clay loam to clay subsoil; derived from Triassic rocks.

Ratings for agricultural use are as follows: Mayodan - fair to good to tobacco; good for general farm crops and adapted grasses and legumes for hay and pasture; fair for woodland. Creedmoor - fair for all agricultural uses and poor for woodland. Also, erosion is a major hazard.

Mayodan has moderate to slight limitations for most non-agricultural uses. Creedmoor has severe limitations except for certain recreational uses.

MAYODAN-PINKSTON

Gently sloping to steep, well drained upland soils with a grayish-yellow to yellowish-red silt loam to gravelly fine sandy loam surface layer underlain by a yellowish-red to red to purplish-red, friable to slightly plastic silty clay loam to clay subsoil, derived from Triassic rocks.

Ratings for agricultural uses are as follows: Mayodan - fair to good for tobacco, good for general farm crops and adapted grasses and legumes for hay and pasture; fair for woodland. Due to its inherent characteristics, Pinkston has a rating of poor for all agricultural uses including woodland.

Erosion is the major hazard for all of these soils. Severely eroded Pinkston, regardless of slope, is only suited to permanent vegetation which is almost impossible to establish.

Due to the steeper topography of this association, Mayodan has moderate to severe limitations when used for dwellings, septic filter fields, light industry and playgrounds. For the other uses, limitations range from slight to moderate.

Pinkston has severe limitations for the non-agricultural uses.

WHITE STORE - CREEDMOOR

Gently sloping to moderately steep, moderately well drained upland soils with a grayish-brown to yellowish-brown silt loam to fine sandy loam surface layer underlain by a friable to firm, sticky and very plastic, yellowish-brown to multi-colored sandy clay loam to clay subsoil, derived from Triassic rocks.

Due primarily to its shallow surface layer, slowly permeable, plastic subsoil and areas of severe erosion White Store is rated poor for all agricultural purposes. Creedmoor has a rating of fair. Both of them rate poor for woodland.

Excluding inherent characteristics, erosion is the major hazard.

The use of White Store for dwellings, filter fields, industry and roads has severe limitations; for certain recreational uses, the limitations are moderate to severe with the accent on severe. Creedmoor also has severe limitations for the first group but ranges from slight to severe for the latter.

CECIL-APPLING-WILKES

Gently sloping to steep well drained upland soils with sandy loam or gravelly sandy loam surface layers underlain by red, reddish-yellow, brown, or yellowish-brown clay subsoil, derived from crystalline rock.

Cecil and Appling rate fair to good for general agriculture and fair for woodland. Wilkes is rated poor for agriculture and woodland.

Cecil and Appling have slight to moderate limitations when used for dwellings, septic fields, camp sites and picnic areas. For other uses, limitations range from moderate to severe. Wilkes has severe limitations for practically all uses.

TROUP-WAGRAM-BLANEY

Nearly level to moderately steep; well to moderately well drained upland soils with a light gray loamy sand to sand surface layer underlain by a yellowish-brown, sometimes mottled; friable to firm, sticky or brittle; sandy loam to sandy clay loam subsoil; derived from ocean sediment.

Ratings for agricultural use are as follows: Troup - poor to fair for tobacco and general crops. Wagram and Blaney - fair to good for tobacco and general crops. These soils are well suited for the production of lespedeza sericea and coastal bermuda grass for pasture and hay. Blaney rates good for woodland; Wagram - fair and Troup - poor.

The hazards of these soils are dual. The depth and texture of the surface layer which produces droughtiness, excessive leaching and very little water holding capacity is the first. Excessive water on slopes above 4% presents one type of erosion problem, while the broad, open flat areas are susceptible to wind erosion.

Troup and Wagram have slight to moderate limitations for most of the non-agricultural uses; Blaney ranges from moderate to severe.

NORFOLK-WAGRAM-ORANGEBURG

Nearly level to moderately steep, well drained upland soils with a grayish to yellowish-brown sandy loam to loamy sand surface layer underlain by a yellowish-brown to red, friable to firm sandy clay loam subsoil; derived from ocean sediment.

Agricultural ratings for tobacco and general farm crops are: Norfolk and Orangeburg - good, including woodland; Wagram - fair to good for crops and fair for woodland.

All of these soils are well adapted to lespedeza sericea and coastal bermuda for pasture and hay. Norfolk and Orangeburg are also good producers of fescue and clover.

The major hazard to Norfolk and Orangeburg is water erosion. Wagram has inherent hazards (See Association No. 6) and the water hazard.

Limitations for most non-agricultural uses range from slight to moderate for all of these soils.

CHEWACLA-CONGAREE

Nearly level to gently sloping; well to somewhat poorly drained; first bottom soils with variable texture; subject to high water table, pondage and/or overflow; derived from recent stream alluvium.

The agricultural ratings for these soils are: Chewacla; poor for tobacco, fair to good for general crops and good for adapted pasture and hay crops. Congaree; poor for tobacco (flooding), good for general crops and adapted pasture and hay crops. The inclusions would be rated as poor for all agricultural uses except pasture which would be fair to poor. The woodland rating for both soils is good.

Excess water, surface and subsurface, is the major hazard for this association. If the overflow hazard can be eliminated, drainage by diversions, open ditch and tile is effective; however, there will be a continual maintenance problem.

These soils have severe limitations when used for dwellings, filter fields, industry, roads and certain recreational uses.

AUGUSTA-ALTAVISTA-ROANOKE

Nearly level to gently sloping, moderately well to poorly drained, low terrace soils with a grayish-brown to gray silt loam surface layer underlain by a yellowish-brown to gray, friable to firm fine sandy clay loam to clay subsoil; derived from old stream alluvium.

The agricultural ratings for these soils are: Augusta; poor to fair for tobacco and fair for all other uses. Altavista; fair to poor for tobacco and fair to good for all other uses. Roanoke; poor for all uses. The inclusions would be rated as poor for all agricultural uses except pasture which would be fair to poor. Woodland ratings range from fair to good.

Excess water surface and subsurface is the major hazard for this association. Even with a complete water control and drainage system installed, continual maintenance problems would exist.

These soils have severe limitations when used for dwellings, filter fields, industry, roads and certain recreational uses. Note: Part of the portion in the NW section of the county would have only moderate limitations for industry, dwellings, roads and certain recreational uses. It is neither large nor contiguous, therefore, it has not been separated.

WICKHAM

This is a gently sloping, well drained, high stream terrace soil with a brown to reddish-brown fine sandy loam surface layer underlain by a yellowish-red to red, friable, fine sandy clay loam subsoil; derived from old stream alluvium.

Wickham is rated good for all agricultural purposes and fair to good for woodland.

Erosion is the major hazard. Slopes above 4% are highly susceptible.

Wickham has slight limitations for most non-agricultural uses.

HERNDON-GEORGEVILLE

Gently sloping to moderately steep, well drained upland soils with a grayish-brown to yellowish-red silt loam or slaty silt loam surface layer underlain by a yellowish-red to red, friable to firm silty clay loam to clay subsoil; derived from "Carolina Slates".

Due primarily to their lack of depth and water holding capacity, the Herndon soils have a rating of fair to good for all agricultural uses and fair for woodland. The Lignum soils are rated fair to poor due to depth, water holding capacity, slow permeability, very plastic lower subsoil and flat slopes which present a water problem. Woodland rating is poor.

Excluding inherent characteristics, erosion is the major hazard.

Herndon has moderate limitations for most non-agricultural uses; Lignum has severe.

GOLDSTON

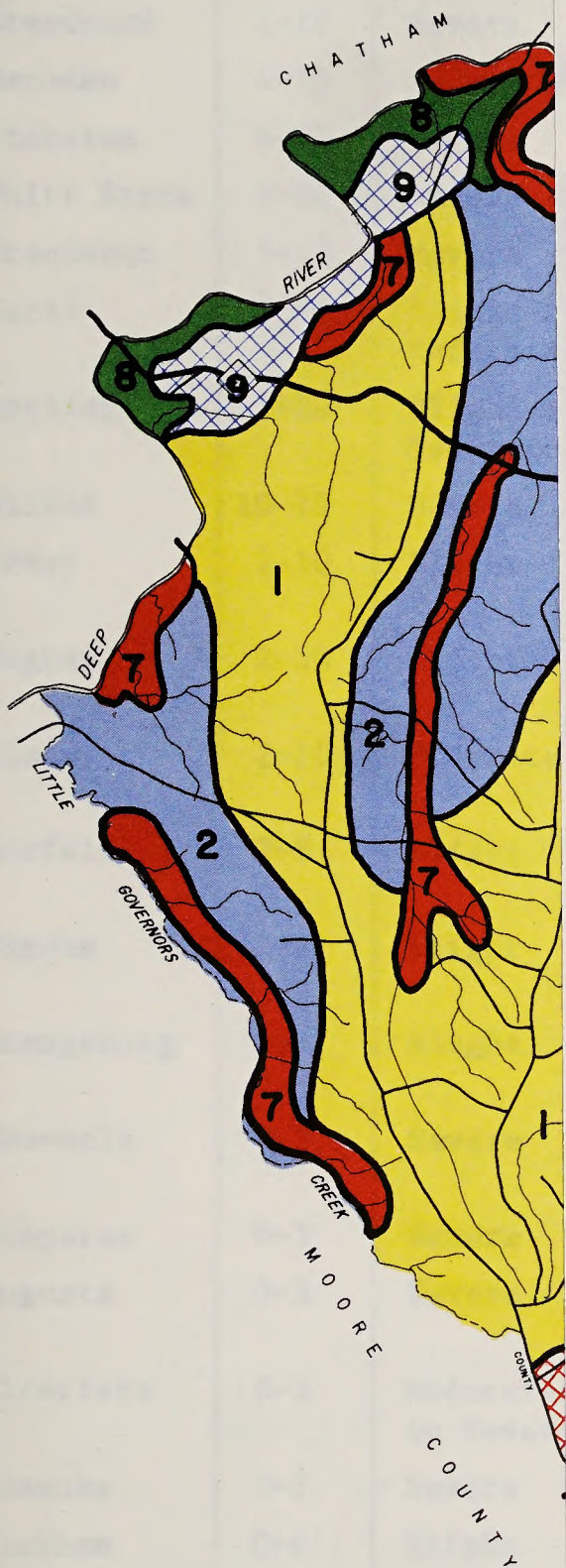
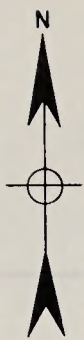
This is a sloping to steep, shallow, stoney or slaty, well drained upland soil with a light grayish-brown silt loam or slaty silt loam surface layer 0-12" thick underlain by rock or a light yellowish-brown or yellowish-red, friable silty clay loam subsoil. Soil derived from "Carolina Slate".

Due to its inherent characteristics, listed above, Goldston soils have a rating of poor for all agricultural uses and woodland.

Except for limitations listed, erosion is the major hazard.

Goldston has severe limitations for all non-agricultural uses.

LEE COUNTY NORTH CAROLINA



GENERAL SOIL MAP

1	MAHON - FREEMORE
2	MAHON - FURTON
3	WHITE STONE - CHEEDWOOD
4	CECIL - APPLE - WILKES
5	TOLP - WAGMAN - BLANEY
6	YON - WAGMAN - ORANGEBOURNE
7	DE WIL - TOWARDS
8	AGUSTA - ALAYISTE - ROANOK
9	WILKES
10	LEWIS - BURGESS
11	HERNAND - LINDSEY
12	GOLSTON

HERNDON-GEORGEVILLE

Gently sloping to moderately steep, well drained upland soils with a grayish-brown to yellowish-red silt loam or slaty silt loam surface layer underlain by a yellowish-red to red, friable to firm silty clay loam to clay subsoil; derived from "Carolina Slates".

Due primarily to their lack of depth and water holding capacity, the Herndon soils have a rating of fair to good for all agricultural uses and fair for woodland. The Lignum soils are rated fair to poor due to depth, water holding capacity, slow permeability, very plastic lower subsoil and flat slopes which present a water problem. Woodland rating is poor.

Excluding inherent characteristics, erosion is the major hazard.

Herndon has moderate limitations for most non-agricultural uses; Lignum has severe.

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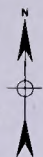
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Due to its inherent characteristics, listed above, Goldston soils have a rating of poor for all agricultural uses and woodland.

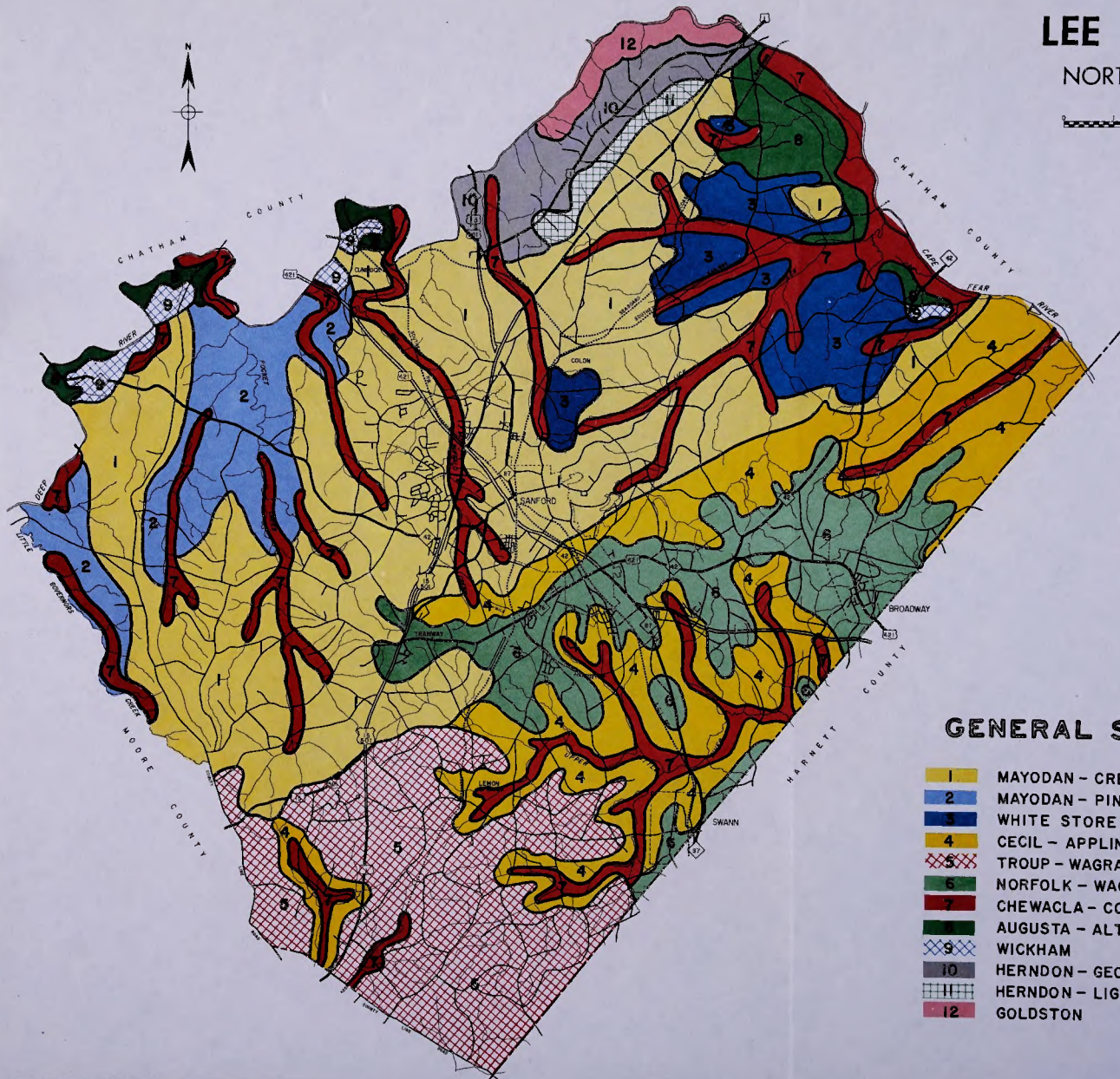
Except for limitations listed, erosion is the major hazard.

Goldston has severe limitations for all non-agricultural uses.

LEE COUNTY NORTH CAROLINA



SCALE
0 1 2 3 4 MILES



GENERAL SOIL MAP

- | | |
|----|-------------------------------|
| 1 | MAYODAN - CREEDMOOR |
| 2 | MAYODAN - PINKSTON |
| 3 | WHITE STORE - CREEDMOOR |
| 4 | CECIL - APPLING - WILKES |
| 5 | TROUP - WAGRAM - BLANEY |
| 6 | NORFOLK - WAGRAM - ORANGEBURG |
| 7 | CHEWACLA - CONGAREE |
| 8 | AUGUSTA - ALTAVISTA - ROANOKE |
| 9 | WICKHAM |
| 10 | HERNDON - GEORGEVILLE |
| 11 | HERNDON - LIGNUM |
| 12 | GOLDSTON |

Table 1
Land-Use Limitations for Soil Associations
Lee County

ASSOCIATION	SLOPE RANGE (%)	DEGREE OF LIMITATION FOR				SUITABILITY FOR	
		DWELLINGS	SEPTIC TANKS	ROADS & STREETS	LIGHT INDUSTRY	GENERAL AGRICULTURE	WOODLANDS
Mayodan	4-10	Moderate	Moderate	Moderate	Moderate	Good	Fair
Creedmoor	4-10	Severe	Severe	Severe	Severe	Fair	Poor
Mayodan	4-15	Moderate	Moderate	Moderate	Moderate	Good	Fair
Pinkston	8-25	Severe	Severe	Severe	Severe	Poor	Poor
White Store	3-10	Severe	Severe	Severe	Severe	Poor	Poor
Creedmoor	3-10	Severe	Severe	Severe	Severe	Fair	Poor
Cecil	3-10	Slight to Moderate	Moderate	Moderate to Severe	Moderate to Severe	Fair to	Fair
Appling	3-10	Slight to Moderate	Moderate	Moderate to Severe	Moderate to Severe	Fair to Good	Fair
Wilkes	10-25	Severe	Severe	Severe	Severe	Poor	Poor
Troup	2-10	Slight	Slight to Moderate	Slight to Moderate	Slight to Moderate	Poor to Fair	Poor
Wagram	2-10	Slight	Slight to Moderate	Slight to Moderate	Slight to Moderate	Fair to Good	Fair
Blaney	2-10	Moderate	Moderate to Severe	Moderate	Moderate	Fair to Good	Good
Norfolk	2-8	Slight	Slight to Moderate	Slight	Slight to Moderate	Good	Good
Wagram	2-8	Slight	Slight to Moderate	Slight to Moderate	Slight to Moderate	Fair to Good	Fair
Orangeburg	2-8	Slight	Slight to Moderate	Slight	Slight to Moderate	Good	Good
Chewacla	0-3	Severe	Severe	Severe	Severe	Fair to Good	Good
Congaree	0-3	Severe	Severe	Severe	Severe	Good	Good
Augusta	0-3	Severe	Severe	Severe	Severe	Poor to Fair	Fair to Good
Altavista	0-3	Moderate to Severe	Severe	Severe	Severe	Fair to Good	Fair to Good
Roanoke	0-3	Severe	Severe	Severe	Severe	Poor	Good
Wickham	0-6	Slight	Slight	Slight	Slight	Good	Fair to Good
Herndon	6-15	Moderate	Moderate to Severe	Moderate to Severe	Moderate to Severe	Fair to Good	Fair
Georgeville	6-15	Moderate	Moderate to Severe	Moderate	Moderate to Severe	Good	Good

Source: 15. Soil Conservation Service. 1971. General Soil Map & Interpretations:

Lee County, N. C.

C) Geology and Minerals (Aquifers)¹⁵

The geology in Lee County comprises three basic rock types or units. These units are: the volcanic slate series of the Paleozoic age; the Newark group of Triassic age or origin; and the Coastal Plain sediments of the Cretaceous age. Along the stream bottom, floodplain alluvium or material is found.

1) Volcanic Slate Series

The volcanic slate series can be considered an aquifer. Water in the slate flows along planes of bedding through weathered fractures in the slate. Fracturing normally occurs within 300 feet deep. Wells in the area may yield 5 gallon per minute (gpm) which is considered satisfactory for domestic use. Water from the slate series is slightly acidic and soft. When considering residential, industry or commercial development, land sites should not be less than 5 acres in size for adequate production of water. Average flow on a 5 acre tract is 11 gpm. The volcanic slate series crops out in two areas of the county and is separated by the Triassic graben. The Piedmont slate crops out in the northeastern part of the county along the Deep River fringe area. In areas south and east of Sanford from the Moore County border to the northeast corner of the county, the Fall Zone slate crops out.

2) Newark Group

Rocks of the Newark group crops out in the northeast direct belt which parallels the Fall Zone. The Newark Group comprises three formations and in ascending order, are the

¹⁵ Geology and Ground Water Resources of the Fayetteville Area, by: The Department of Water Resources, 1961 and Greater Sanford 201 Wastewater Facilities Plan, by: Boneyand Associates, 1975.

Pekin, the Cumnock, and the Sanford. The Pekin and Sanford formations consist of red claystone, siltstone, sandstone, and conglomerate. The Cumnock formation consists of gray and black shale gray calcareous siltstone, fine-grained sandstone, and two beds of coal. The thickness of the Newark group has been estimated to range from 7,000 to 8,000 feet.

The chief product of the Newark group is the clay derived from weathered shale. The clay is used in several brick, tile and pottery plants. Some sandstone has been used for building.

Coal is found in the Deep River Coal Field in the northern portion of the county. However, the Deep River fault has displaced the coal beds a vertical distance of 2,000 feet in Lee County, and the faulting of the coal beds has prevented economical extraction of the coal.

Shale found in the vicinity of the coal beds is rich in nitrogen and phosphorous and was mined in conjunction with the coal and used as fertilizer. Oil shale associated with the coal may have some future value as it has an oil content of almost 10 gallons per ton.

3) Tuscaloosa Formation

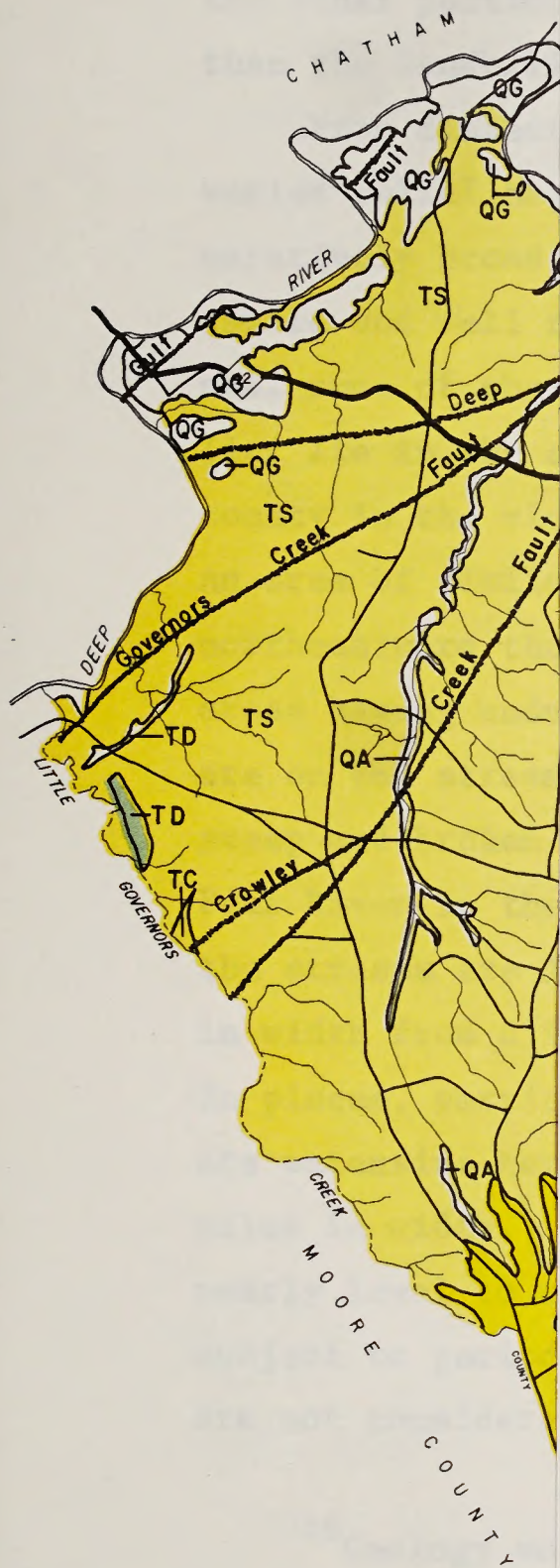
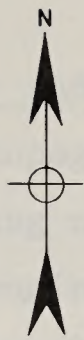
The Tuscaloosa formation is the basal Coastal Plain formation in the Lee County area. Its boundary is irregular, the Coastal Plain strats having been considerably eroded in the Fall Zone.

The Tuscaloosa formation appears to rest directly on rocks of the volcanic slate series and the Newark group.

The Tuscaloosa formation appears as a series of beds of tan to reddish-brown loose to fairly well consolidated sandy clay with loose sand at the surface. Beneath these weathered beds, in deep exposures and well cuttings, the foundation is predominantly a light-gray to bluish-gray clay.

The Tuscaloosa formation is mainly a massive clay containing interbedded layers of sand. At the surface the clay and the coarser material are intimately mixed.

Contained in this study is a Geology Map of Lee County. Observe the alphabetical delineations on the map.

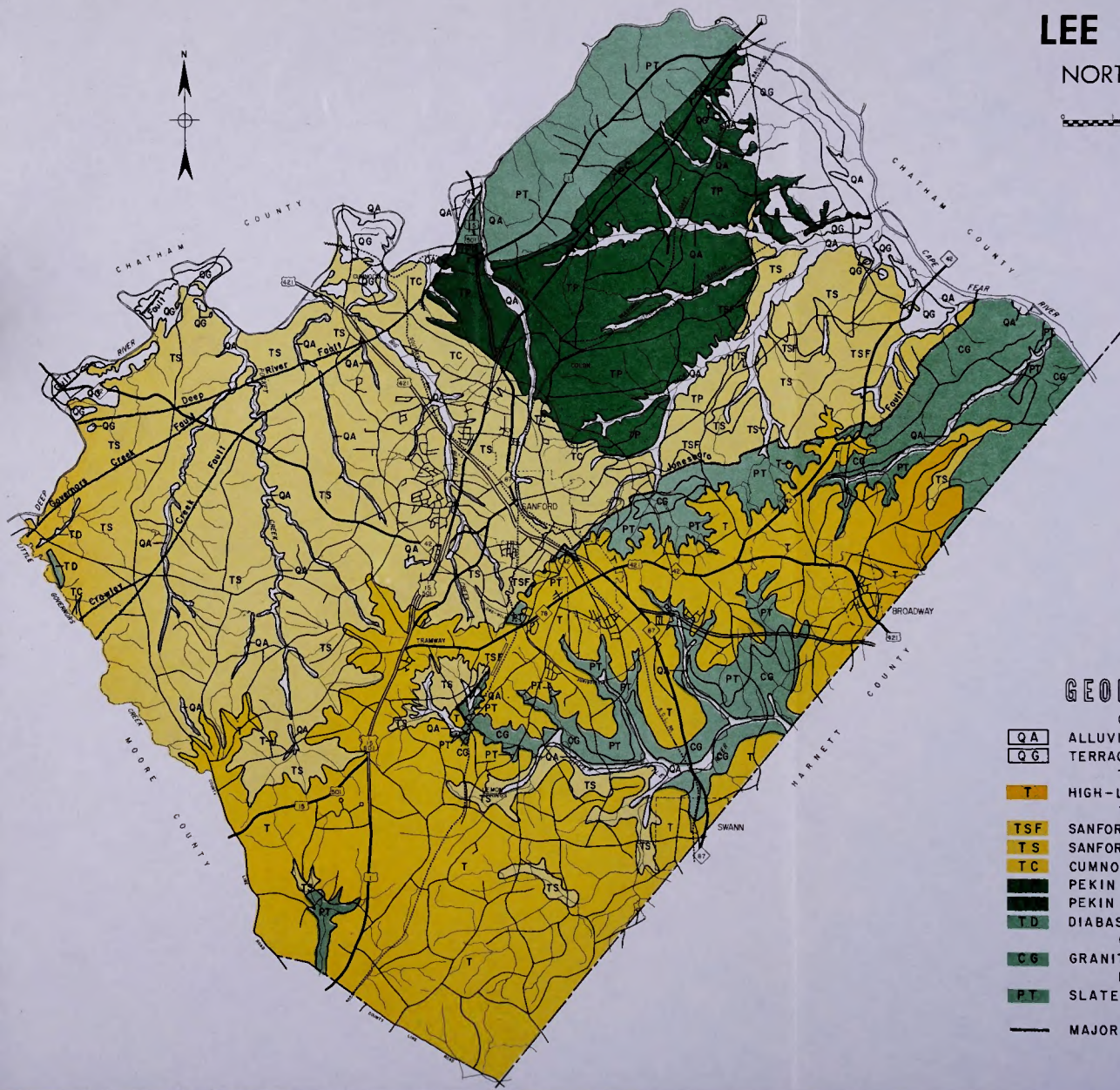
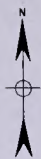
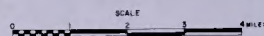


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LEE COUNTY

NORTH CAROLINA



GEOLOGIC MAP

- QUATERNARY
- QA ALLUVIUM-STREAM DEPOSITS
- QG TERRACE GRAVEL DEPOSITS
- TERTIARY
- T HIGH-LEVEL SURFICIAL DEPOSITS
- TRIASSIC (NEWARK GROUP)
- TSF SANFORD: BASAL FANGLOMERATE
- TS SANFORD FORMATION
- TC CUMNOCK FORMATION
- PEKIN FORMATION
- PEKIN BASAL CONGLOMERATE
- TD DIABASE
- CARBONIFEROUS
- CG GRANITE
- PRE-TRIASSIC
- PT SLATE, SCHIST, GNEISS
- MAJOR FAULT LINES

D) Topography and Drainage¹⁶

The topography in Lee County is moderately high and upland, having numerous streams that have cut shallow to deep valleys ranging in width from $\frac{1}{2}$ to 2 miles. The Coastal Plain, commonly known as the Sandhills, covers one third of the southern part of the county. The Piedmont Plateau covers the other portion of the county and comprises steeper valleys than the Sandhills.

From dissection of the original upland, a country of varied relief has resulted, consisting of narrow or comparatively broad undulating or rolling interstream ridges, gentle and well rounded slopes, and steep and broken areas near some of the streams. The broadest ridges of smooth relief lie in the eastern, central and southern parts of the county in the vicinities of Broadway, Sanford, and Tramway. An area of similar relief extends from a point near Sanford northeastward through Colon and north of Osgood. Narrower areas having undulating, gently rolling, and rolling relief are on the stream divides in the northwestern part. Areas of steep and broken relief have developed on slopes toward Cape Fear River in the extreme northeastern part. Along most of the streams are low, almost level, bottom lands ranging in width from a few feet to about three-fourths of a mile. In places, particularly near Deep River and Cape Fear River, are extensive terraces ranging from a few feet to about 2 miles in width. The relief of these terraces ranges from nearly level to rolling. Most of the stream bottoms are subject to periodic flooding although flood control projects are not considered necessary.

¹⁶Geology and Ground Water Resources of the Fayetteville Area, by: The Department of Water Resources, 1961 Greater Sanford 201 Wastewater Facilities Plan, by: Boney Associates, 1975.

An important drainage divide is formed by the edge of the Coastal Plain and the Piedmont Plateau along the Fall Zone. The dividing ridge enters the southern part of the county at White Hill on the Moore County line, extends northeastward through Tramway and Jonesboro to Sanford and then northward to the Deep River. Northwest of this divide, the Sanford basin is drained by streams flowing northward to Deep River. Southeast of this divide, the Coastal Plain is drained by southeastward flowing streams. The area north of the Colon cross structure, a secondary divide, is drained mainly by Lick Creek and its tributaries which flow northeastward to the Cape Fear River.

Deep, Cape Fear, and Upper Little Rivers provide outlets for practically all the drainage waters. Drainage basins are shown on the drainage map. Because of the moderately high elevation of the county above sea level, the rolling and sloping relief, and the completeness of the natural drainage system, surface drainage is good throughout the upland part, but on many of the steeper slopes run-off is so rapid that it causes serious erosion. In some of the low bottoms and in flats and depressions natural drainage is not well established, and ditches are necessary to provide adequate drainage.

The streams have cut their valleys from 50 to 150 feet below the general level of the upland, and the flow of water is sufficiently swift that their channels are maintained. In some of the larger creeks and branches, the flow was sufficient for the development of water power, and gristmills were operated in times past. Two hydro-electric plants on Deep River and one on Cape Fear River were built in the 1920's but their operation has been discontinued for some time.

Rivers and minor tributaries are tremendous assets for natural drainage. Small quantities of wastes may be discharged into the ground but larger quantities of wastes from cities and industries necessitate wastewater discharges into larger bodies of water such as the Deep, Cape Fear and Upper Little Rivers. Contained in this study is a map of Lee County which delineates drainage basins and stream classifications.

An explanation for the best usage of water in each class which was derived from the State Stream Sanitation Committee and is as follows:

Class A-II - Suitable as a source of water supply for drinking, culinary or food processing after treatment by an approved disinfection or adequate treatment of coagulation; sedimentation; filtration, etc., and any other usage requiring waters of lower quality.

Class B - Suitable for outdoor bathing and any other usage requiring waters of lower quality.

Class C - Suitable for fishing and fish propagation, and any other usage requiring waters of lower quality.

Class D - Suitable for agriculture and for industrial cooling and process water after treatment by the user as may be required under each particular circumstances.

The pollution and abatement control program, which takes into consideration the necessity of utilizing streams for disposing of treated wastes, is based upon maintaining water quality in accordance with assigned classifications under critical conditions of high stream temperature and the average 7-day minimum flow with a recurrence interval of 10 years.

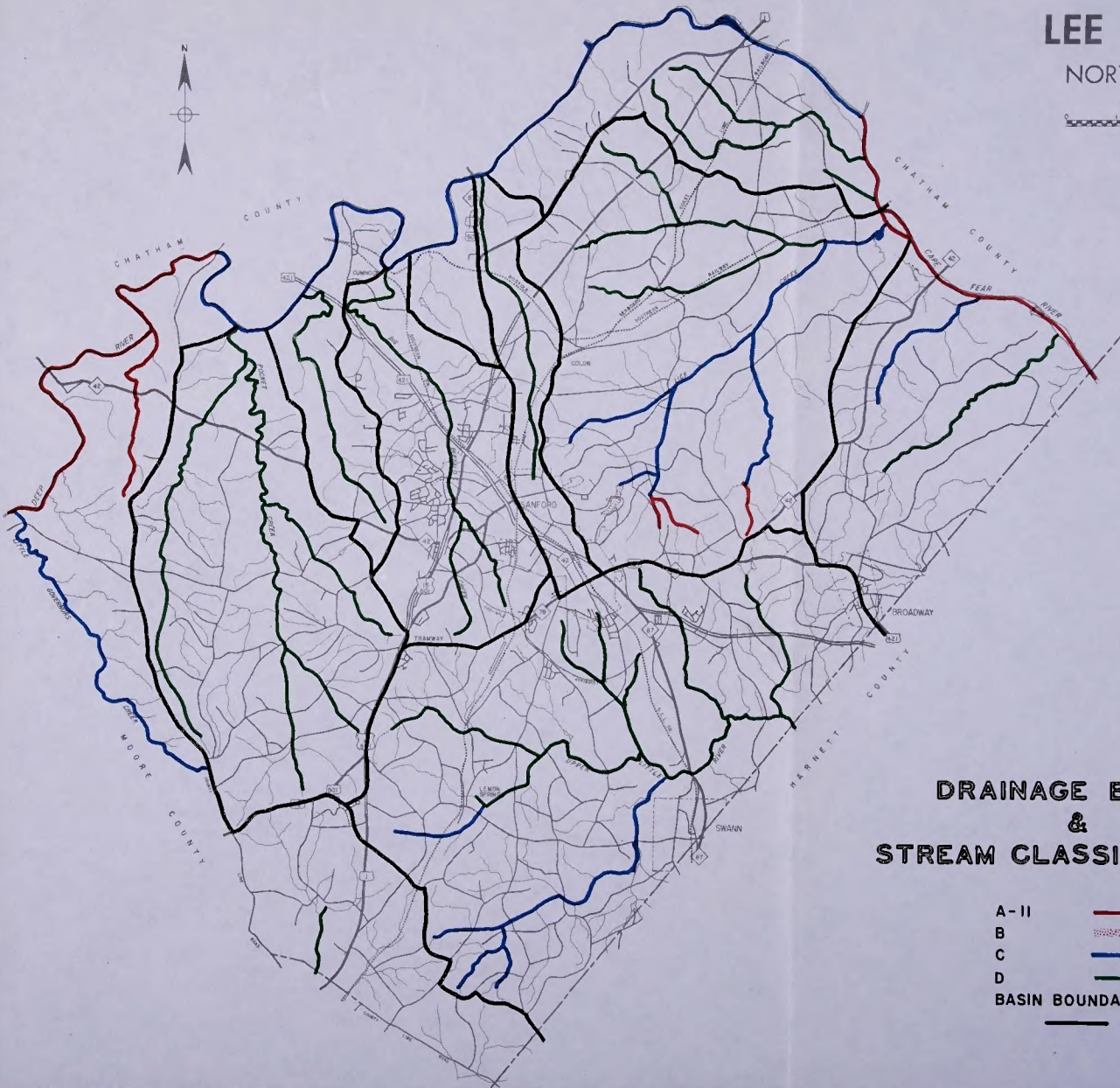
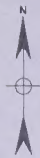
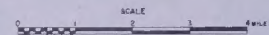


LEE COUNTY
NORTH CAROLINA

DRAINAGE BASINS
&
STREAM CLASSIFICATIONS

WATER DIVISION
BASIC BOUNDARIES

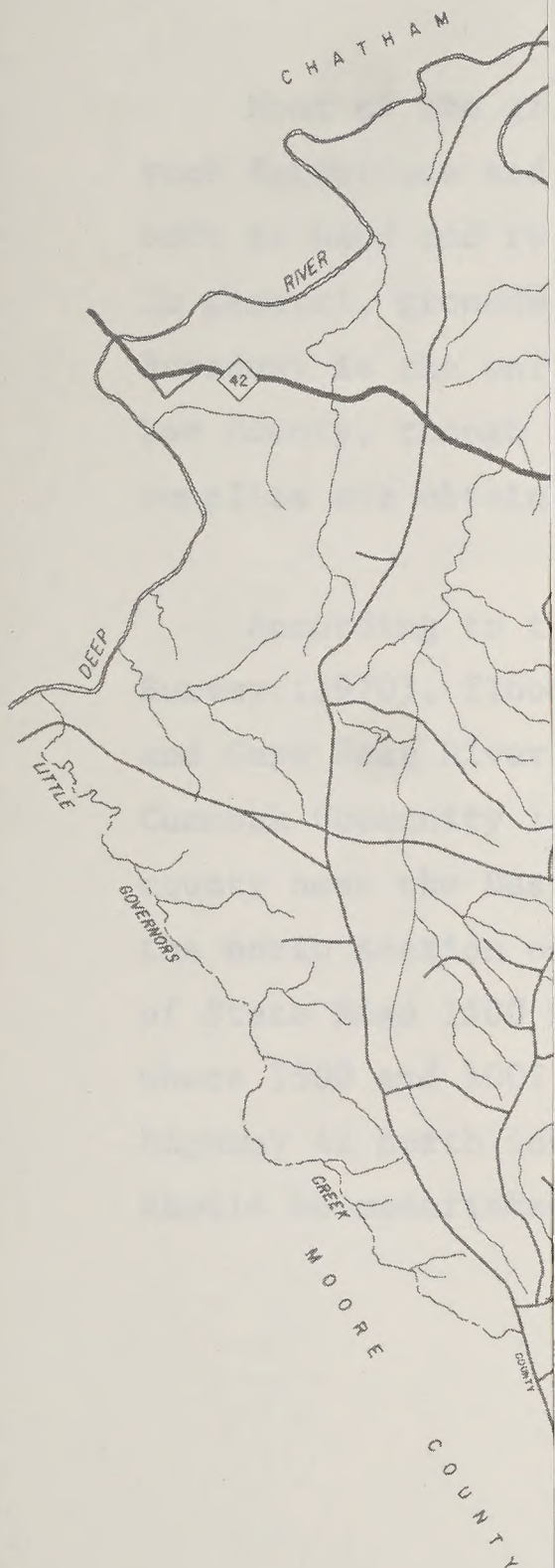
NORTH CAROLINA



The following table is a breakdown of Lee County's wastewater facilities and locations. Also, see Wastewater Discharge Map for Lee County.

LEE COUNTY: WASTEWATER DISCHARGES

#	Name	Est. Flow (mgd)	Receiving Stream
1.	Carne's Corporation	.020	Gasters Creek
2.	Cook's Wholesale Plty.	.050	
3.	Deep River High School	.011	Sand Filter
4.	Greenwood High School	.018	Sand Filter
5.	Lee Elementary School	.0083	Sand Filter
6.	Martin Marietta Agg.	.014	Mulatto Br.
7.	Patterson's Parking Co.	.0024	Purgatory Creek
8.	Roberts Engineers, Inc.	.006	Big Buffalo Creek
9.	Sanford Water Treatment Pl.	.07	Cape Fear River
10.	Spanco Industries	.0012	Sand Filter
11.	Wilson & Co. Hatchery	.001	Sand Filter
12.	Carolina Trace Subd.	.033	Little River



LEE COUNTY
NORTH CAROLINA

AROLDING TRAIL LAKE

WASTEWATER DISCHARGES

MAP 2

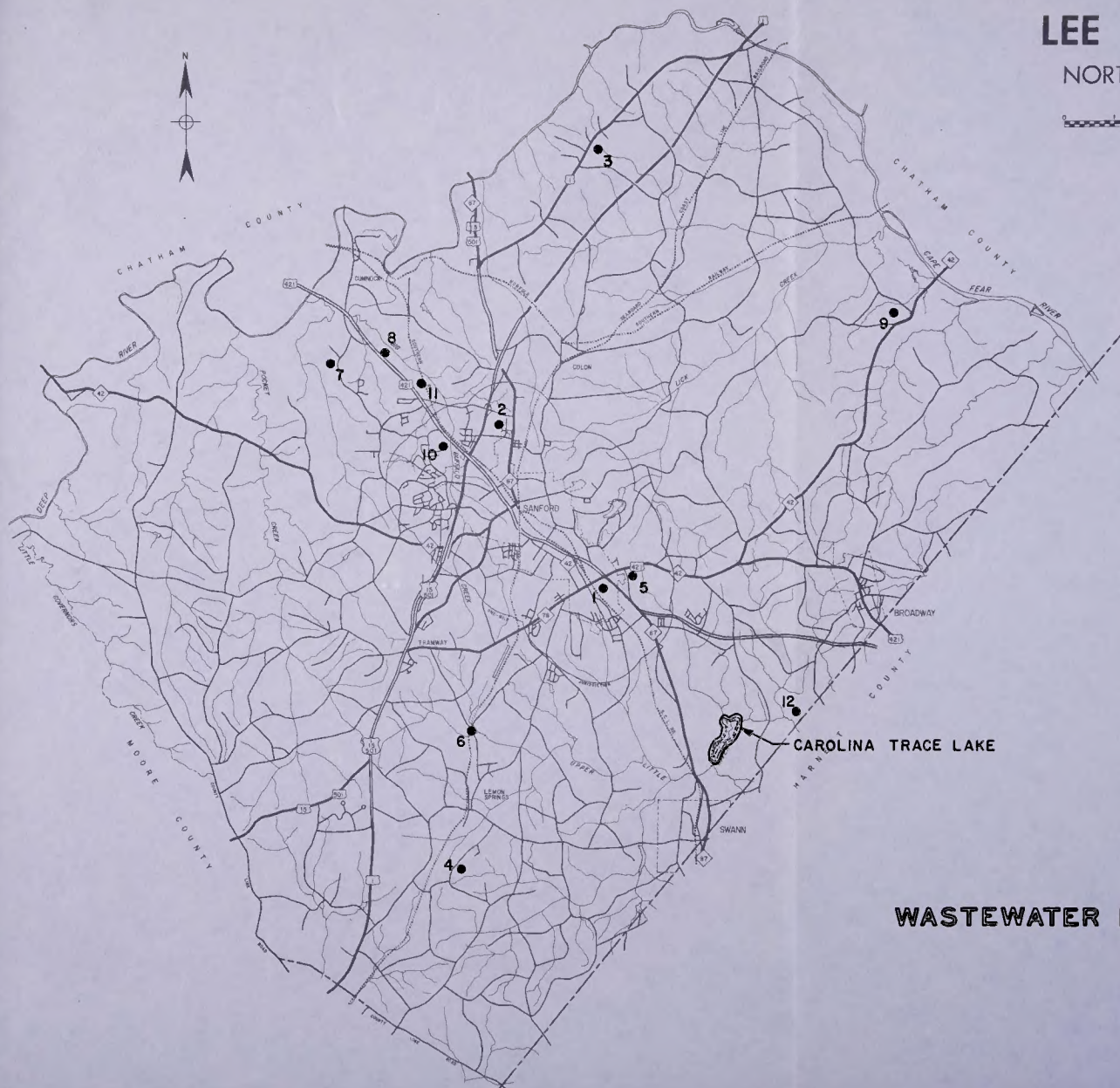
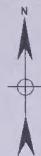
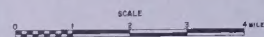
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LEE COUNTY

NORTH CAROLINA



WASTEWATER DISCHARGERS

Water Resources (Surface, Groundwater and Flood Areas)¹⁷

Lee County has an abundance of surface water, namely the Deep, Cape Fear, and Upper Little Rivers. These rivers, if properly treated, can provide enough water to supply the two municipalities and all industries in Lee County.

Most of the groundwater in Lee County is from the Triassic rock formations and is slightly alkaline. The water varies from soft to hard and relatively large amounts of dissolved solids. In general, groundwater in Lee County is potable without treatment. Broadway is the only municipality that utilizes groundwater in Lee County, though all rural domestic and some rural industrial supplies are obtained from wells.

According to the U.S. Department of Interior, Geological Survey (1970), flood prone areas are delineated along the Deep and Cape Fear Rivers. Possible flood hazard areas are the Cumnock Community located in the northwestern section of the county near the Deep River and the Blacknel Community located in the north section of the county near the Cape Fear River. Much of State Road 1500 is in designated flood prone areas, beginning where 1500 and 1002 north intersect and ending where 1500 and highway 42 north intersect. Careful analysis of these areas should be undertaken prior to any form of development.

¹⁷ Ibid.

F. Woodlands

There was a survey and inventory of forestry conducted in Southern Coastal Plain of North Carolina. The survey included 21 counties and was started in November, 1972, and completed in August, 1973. Three previous surveys, completed in 1937, 1952 and 1962, provided statistics for measuring changes and trends over the past 36 years.

Forest Resources Research, authorized by the McSweeney-McNary Forest Research Act of 1928, is continuing nationwide undertaking by the regional experiment stations of the Forest Service, USDA. In Florida, Georgia, North Carolina, South Carolina and Virginia, Forest Resources Research is administered through the Southeastern Forest Experiment Station, with headquarters at Asheville, North Carolina. The objective of the statewide timber surveys or inventories is to periodically measure and evaluate the timber resource.

In Lee County there is a total of 163,840 acres in the county of which 111,918 acres or 68% is commercial forest land. Nonforest land constitutes 51,922 acres or 32%. The unproductive forest is comparable to the other counties, meaning that there is none set aside in each. However, productive research land is not comparable to some of the other counties, meaning that there is no reserved forest land in Lee County.

The following table includes 21 counties in the Southern Coastal Plain of North Carolina. It identifies The amount of commercial, unproductive, productive reserved and nonforest land in each county.

TABLE 2 --AREA, BY LAND CLASS AND COUNTY, 1973

COUNTY	ALL LAND ²⁰		FOREST LAND		NONFOREST LAND ²¹	
	TOTAL	COMMERCIAL FOREST	UNPRODUCTIVE FOREST	PRODUCTIVE RESERVED		
	-----ACRES-----					
BLADEN	565,815	435,530	433,598	1,932	130,285	
BRUNSWICK	548,383	430,862	430,862	--	117,521	
COLUMBUS	606,448	417,463	417,463	--	188,985	
CUMBERLAND	418,917	238,369	238,213	156	180,548	
DUPLIN	521,600	311,412	311,412	--	210,188	
GREENE	170,880	77,178	77,178	--	93,702	
HARNETT	385,778	214,487	212,109	2,378	171,291	
HOKE	249,531	159,462	159,462	--	90,069	
JOHNSTON	509,677	263,120	263,120	--	246,557	
JONES	304,420	231,867	231,867	--	72,553	
LEE	163,840	111,918	111,918	--	51,922	32%
LENOIR	256,00	122,914	122,914	--	133,086	
MOORE	450,861	342,185	341,762	423	108,676	
NEW HANOVER	130,538	60,549	60,312	237	69,989	
ONSLow	494,453	377,076	377,046	30	117,377	
PENDER	558,376	450,817	450,785	32	107,559	
RICHMOND	303,673	219,309	219,309	--	84,364	
ROBESON	607,765	297,421	297,421	--	310,344	
SAMPSON	604,800	358,571	358,571	--	246,229	
SCOTLAND	204,656	124,464	124,464	--	80,192	
WAYNE	355,400	152,661	152,111	550	202,739	
TOTAL	8,411,811	5,397,635	5,391,897	5,738	3,014,176	

²⁰From U. S. Bureau of the Census, Land and Water Area of the United States, 1970.²¹Includes 70,754 acres of water according to survey standards of area classification but defined by the Bureau of the Census as land.

G. Wildlife

To sustain or generate wildlife in an area, one must consider two contributing elements or two limiting factors namely, climate and soils. Each element or factor may or may not be conducive to the type of wildlife desired in an area. The combined effects of the two warrant adequate food, cover and water which are necessary to sustain a wildlife population.

The Potential for Outdoor Recreation in Lee County, North Carolina (march, 1972) indicated that there are few areas in rural Lee County that are without huntable wildlife. Furthermore, the study listed and rated all wildlife and the list is as follows.

WILDLIFE AND WILDLIFE HABITAT

SPECIES	POP. RATING	EXISTING HABITAT RATING	HABITAT POTENTIAL	NO. ACRES POTENTIAL HABITAT
Deer, whitetailed	Poor	Fair	Fair	30,000
Rabbits, cottontail	Good	Fair	Fair	75,000
Rabbits, marsh	Fair	Poor	Poor	10,000
Squirrels	Good	Good	Good	50,000
Bobwhite, Quail	Good	Good	Good	100,000
Dove, mourning	Fair	Fair	Fair	40,000
Ducks	Fair	Fair	Fair	75,000
Geese	Poor	Fair	Fair	50,000
Turkey	Fair	Fair	Fair	40,000
Furbearers:				
Raccoon	Good	Good	Good	100,000
Muskrat	Good	Fair	Fair	75,000
Mink	Fair	Fair	Fair	100,000
Fisheries:				
Warm Water	Good	Fair	Fair	

H. Historic Landmarks ¹⁸

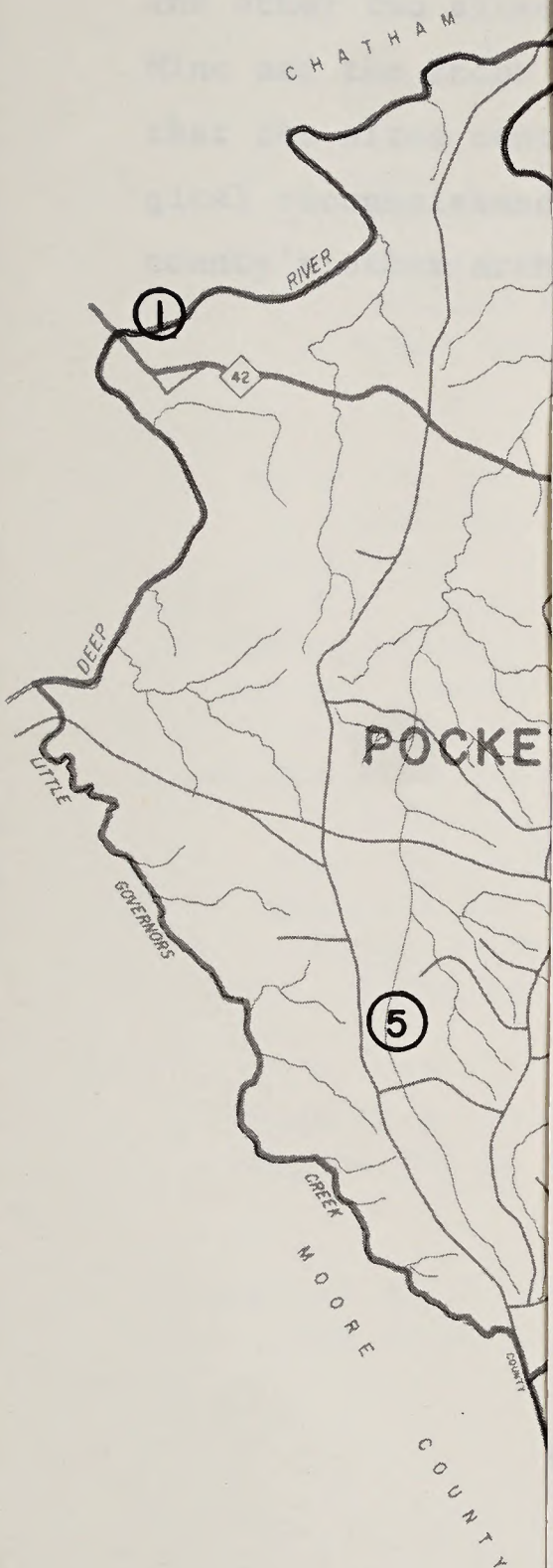
Lee County is fortunate to have such a rich history. There are 17 recognized historic areas in Lee County. An inventory of historical sites and a location map depicting each site are as follows.

¹⁸ The Sandford History, by the Railroad House Historical Association, 1974.

INVENTORY OF NATURAL, SCENIC AND HISTORIC AREAS

NAME OR IDENTITY OF AREA	TYPE OF AREA	LOCATION		SIZE OF AREA	DESCRIPTION OF AREA	PRESENT USE OF AREA	
		TOWNSHIP	HIGHWAY				
1. Caribton Dam and Power plant	Historic	Pocket	Hwy. 42 at Co. line on Deep Riv.	5 Ac.	Old lake and Power plant building is still intact	Abandoned	
2. McIver House	Education Historic Area	Sanford	Hwy. 421 n 4 mi.N. of Sanford, Northwest of Sanford	1 Ac.	Charles D. McIver. Home of McIver Founder of, President of Woman's College of Greensboro. Now the University of N.C. at Greensboro		
3. Clay Pits and Brick Factory	Historic	Sanford	Colon	10 Ac.	Area has numerous old clay pits	Clay Pits	
4. Buffalo Presbyterian Church	Religion Historic	Sanford	On Bus. US 1 S of Sanford	3 Ac.	1880 Congregation founded in 1797 by Scotch Highlanders	Church	
5. Gulf Plank Road	Historic	Greenwood No. 1	Hwy. 1 S at Co. line		1849 Fayetteville to Winston Salem Branch to Cameron & Gulf		
6. Buckhorn Dam Canal and Power Plant	Historic Scenic	Cape Fear		10 Ac.	Dam; Steam plant was rebuilt by Carolina Power and Light Co. Orig. built in 1815	Abandon	
7. Avents Ferry	Historic	Cape Fear	Hwy. 42	3 Ac.	Old ferry across Cape Fear River. Henry Braswell; sold ferry in 1754 to John Avent	Boat Ramp & Park	
8. Lockville Dam Canal and Power Plan	Scenic Historic	Deep Riv.	Hwy. 1 N Co. line	10 Ac.	1920's Private Power Co.	Abandon	

NAME OR IDENTITY OF AREA	TYPE OF AREA	LOCATION TOWNSHIP	HIGHWAY	SIZE OF AREA	DESCRIPTION OF AREA	PRESENT USE OF AREA
9. Endor Iron Furnace	Historic	Sanford	1 1/2 mi. S of Cumnock down river	3 Ac.	Started 1862. A major source of pig iron for Confederacy ceased operation in about 1876 (to make ammunition for Confederate Army)	None
10. Egypt Coal Mine	Historic	Sanford	Endor on Deep Riv.	3 Ac.	1855-1928. Major coal operation. Supplied coal for the Confederacy.	None
11. William Thompson Ferry	Historic	Sanford	Located on Deep Riv. on Co. Rd. 1400		Gulf 1773	None
12. Old Gilliam Mill	Historic	Pocket	Big Pocket Creek		Ca. 1856-Built by Howell and John Gilliam; one of the largest grist and cotton mills in Central N.C.	
13. Railroad Museum	Historic	Sanford	Corner of Hawkins & Carthage	0.5 Ac.	1872. Oldest House in Sanford. now used as museum, built by railroad for their first depot agency, W. T. Tucker (Sanford's first mayor)	Chamber of Commerce
14. John Willcox Iron Furnace	Historic	Pocket	South of Deep Riv. on Hwy. 421	1 Ac.	Started sometime before 1773 across river from Gulf; on S. Side of river A deed shows where iron furnace was.	
15. Thomas Farrish Lam & Locks	Historic	Pocket	Between Cumnock & Endor; across Deep River	.5 Ac.	Built before 1851. Remains still visible at low water. Used to pass boats through lock.	
16. John Montgomery Spring	Historic	Pocket	South of Cumnock on Co. Rd. 1400	.5 Ac.	Spring next to Cumnock	Still present
17. Lemon Springs	Historic Scenic	Greenwood # 1	US 15-501 1/2 mi. W on 15-501 from jct. with US 1 on N side of Rd.	1 Ac.	Major John W. Scott built hotel to take care of summer guest. Part of hotel is still there.	Abandon



LEE COUNTY
NORTH CAROLINA

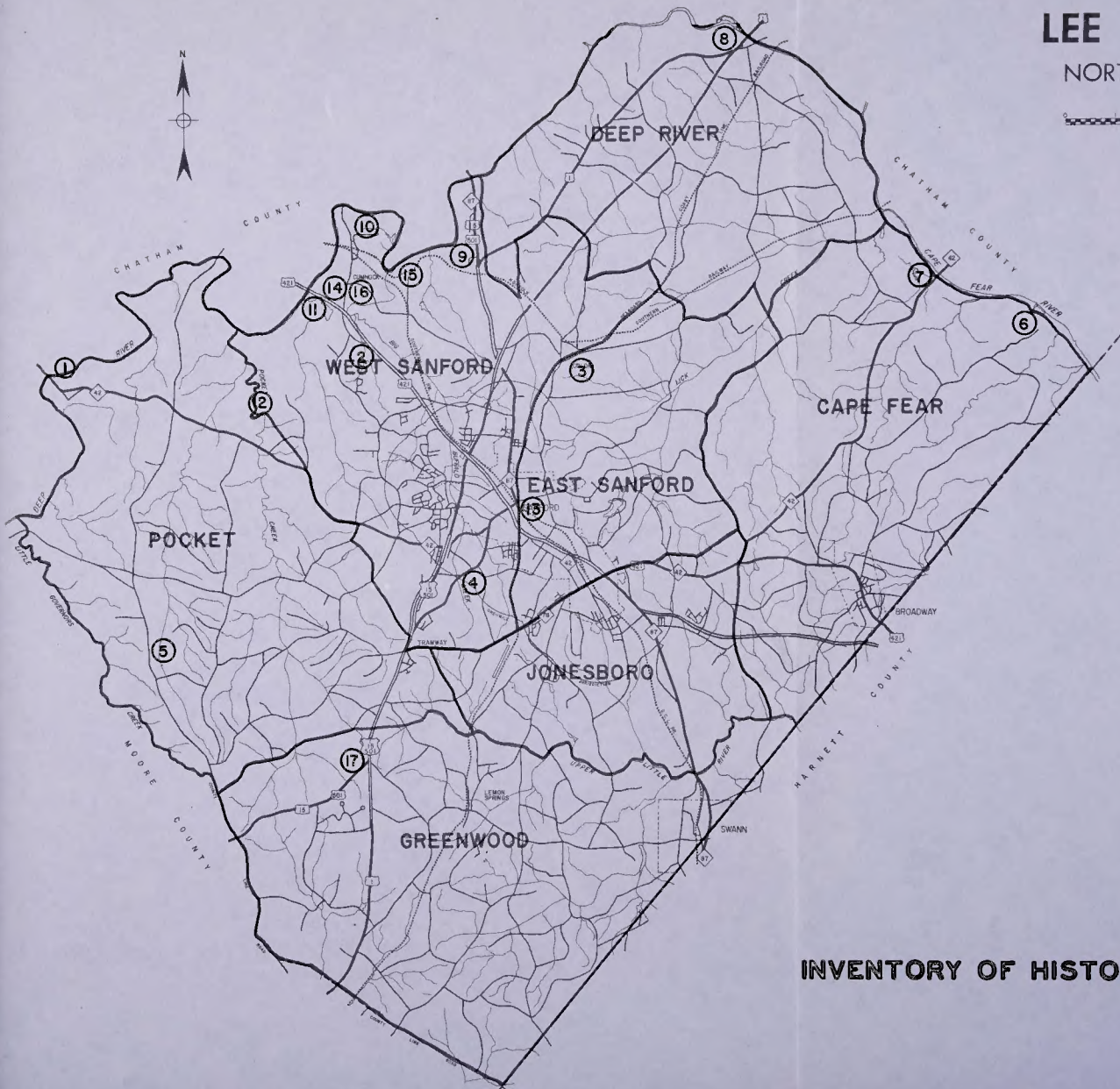
INVENTORY OF HISTORICAL SITES

	NAME OR IDENTITY OF AREA	TYPE OF AREA	LOCATION		SIZE OF AREA	DESCRIPTION OF AREA	PRESENT USE OF AREA
			TOWNSHIP	HIGHWAY			
9.	Endor Iron Furnace	Historic	Sanford	1 1/2 mi. S of Cumnock down river	3 Ac.	Started 1862. A major source of pig iron for Confederacy ceased operation in about 1876 (to make ammunition for Confederate Army)	None
10.	Egypt Coal Mine	Historic	Sanford	Endor on Deep Riv.	3 Ac.	1855-1928. Major coal operation. Supplied coal for the Confederacy.	None
11.	William Thompson Ferry	Historic	Sanford	Located on Deep Riv. on Co. Rd. 1400		Gulf 1773	None
12.	Old Gilliam Mill	Historic	Pocket	Big Pocket Creek		Ca. 1856-Built by Howell and John Gilliam; one of the largest grist and cotton mills in Central N.C.	
13.	Railroad Museum	Historic	Sanford	Corner of Hawkins & Carthage	0.5 Ac.	1872. Oldest House in Sanford. now used as museum, built by railroad for their first depot agency, W. T. Tucker (Sanford's first mayor)	Chamber of Commerce
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LEE COUNTY

NORTH CAROLINA

SCALE
0 1 2 3 MILES



INVENTORY OF HISTORICAL SITES

I. Archaeological Sites

North Carolina Department of Cultural Resources, Division of Archaeology indicates there are three known archaeological sites in Lee County. The most significant was the Beehive Brick Kiln which was used for heating bricks or other ceramic materials. The other two sites of lesser significance were the Egypt Coal Mine and the Endor Iron Furnace. It was further emphasized that the sites mentioned are not a complete list. An archaeological reconnaissance survey is needed to adequately identify the county's other archaeological sites.

V. Development Factors

Key factors for development within an area includes the availability of adequate housing; the residential composition of an area; available community facilities; and occupational opportunities, etc. Factors for development outside an area that encourages development in an area are determined by the external impacts of regional multiregional, state and federal policies and trends.

A. Existing Land Use Characteristics

In 1970, a publication entitled County Business Patterns by the U.S. Department of Commerce ranked manufacturing (primarily textiles) as the largest employer, retail trade and services were ranked second. Agriculture was ranked as the smallest employer. Therefore, it is apparent that agriculture plays a very small role in employment in Lee County.

To substantiate the county's industrial expansion and other land uses, a land use survey was conducted by the Department of Natural and Economic Resources/Division of Community Assistance/Local Planning and Management Services Section in August 1976. During the survey, it was discovered that industrial development is expanding and is heavily concentrated in the southeast section of Lee County near the fringe areas of Sanford and southwest of Broadway near NC Highway 42 and US 421. Strip industrial development is along US Highway 15-501 North. Much of the urbanization in Lee County is primarily centered around Sanford. However, the county is experiencing urban sprawl in the western and southern sections of the county. This is primarily due to the City of Sanford's provision of water and sewer in these areas which encourages residential development.

According to Land Use Planning in North Carolina, published in August 1973, Lee County comprises 163,328 acres or 255 square miles.

The county's land area indicate that it is one of the smaller counties in North Carolina. The following table indicates the types and amount of land uses in Lee County.

Table 3

19
Existing Land Use

	<u>Area in Acres</u>	<u>% of Total</u>
Federal Land	0	0
Urban and Built-up	8,919	5
Water Area	1,260	1
Cropland	30,700	19
Pasture	7,057	4
Forest	111,292	68
Other Land	4,100	3
Total Area	163,328	100

¹⁹ Land Use Planning in North Carolina, August, 1973.

B. Housing Analysis

During August of 1976, a land use survey was conducted by the Department of Natural and Economic Resources/Division of Community Assistance. The purpose of the survey was to identify the location, type and amount of land uses in the county. This included a wind-shield survey of the housing conditions with emphasis on determining whether a house is sound, deteriorating or dilapidated.

In 1973, the same type of survey was conducted by the aforementioned department in the Sanford planning area. The housing data from that survey was extrapolated and compiled with the county's housing data. On each occasion the same method was used to determine the condition of housing and is as follows:

Sound - Considered to be in a good or better state of repair, that is in need of only minor repairs which are generally considered normal maintenance or upkeep.

Deteriorating - In need of major repairs, greater than those considered normal maintenance or upkeep. The unit must not have deficiencies or need repair to the extent that the unit would be uneconomical to repair.

Dilapidated - Units with major defects, deficiencies or in need of major repairs to such an extent that the units are unsafe for human habitation or beyond economical repair. This classification also includes units which have been burned or abandoned but still standing as well as units of inadequate original construction.

The following tables offer detail and summary description of the housing conditions in each township in the county. After each table, there is a brief discussion on the housing conditions. This section is concluded with a compilation of the housing conditions along with a map delineating the housing conditions in each township.

TABLE 4
SURVEY OF HOUSING CONDITIONS
(August, 1976)

Township (1) Greenwood

Detail Description	Sound	Deteriorating	Dilapidated	Total
<u>#Occupied Units</u>	392	172	129	693
Single Family Units	392	172	129	693
Two or More Units	8	0	1	9
Mobile Homes	150	24	8	182
Total Units	550	196	138	884
<u>#Vacant Units</u>	1	0	33	34
Single Family Units	1	0	33	34
Two or More Units	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	1	0	33	34
<u>Summary Description</u>	<u>#Sound & %</u>	<u>#Deteriorating & %</u>	<u>#Dilapidated & %</u>	
Total Units Occupied	550 62%	196 22%	138 16%	
Total Units Vacant	1 3%	0 0%	33 97%	
Total Units	551 60%	196 21%	171 19%	
Total Units Occupied	884 or 96%			
Total Units Vacant	34 or 4%			
Total Units	918 or 100%			

Greenwood Township

The Greenwood Township has a total of 918 housing units of which 21% are deteriorating and 19% of that total are dilapidated units. Both deteriorating and dilapidated units are considered to be substandard and if combined, the substandard housing would yield 40%. This township has the highest amount of substandard housing units in the county. Deep River Township has a total of 402 housing units which is less than half the amount in the Greenwood Township and from Deep River's total housing stock, 34% of the houses (deteriorating and dilapidated) are considered to be substandard. Therefore, Deep River's substandard housing stock is second to Greenwood. Housing improvements are needed in each township.

Vacant units in each township are comparable. Four percent of the total units in Greenwood are vacant and five percent are vacant in Deep River.

TABLE 5
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Township (2) Jonesboro
(includes part of Sanford)

Detail Description	Sound	Deteriorating	Dilapidated	Total
<u>#Occupied Units</u>	1647	150	170	1969
Single Family Units	1647	150	172	1969
Two or More Units	0	0	0	0
Mobile Homes	82	8	0	90
Total Units	1729	158	172	2059
<u>#Vacant Units</u>	210	18	34	262
Single Family Units	210	18	34	262
Two or More Units	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	210	18	34	262
<u>Summary Description</u>	<u>#Sound & %</u>	<u>#Deteriorating & %</u>	<u>#Dilapidated & %</u>	
Total Units Occupied	1729-84%	158-8%	172-8%	
Total Units Vacant	210-80%	18 -7%	34-13%	
Total Units	1939-83%	176-8%	206-9%	
Total Units Occupied	2059 or 89%			
Total Units Vacant	262 or 11%			
Total Units	2321 or 100%			

Jonesboro Township

Jonesboro Township has 2,321 housing units and is the largest township in the County. The township only has 17% substandard housing which includes deteriorating and dilapidated. West Sanford, the second largest township comprises 1,990 units and has 17% substandard housing. It is evident that both townships are not burdened with substandard housing and are probably the better townships in the County with respect to better housing conditions.

Eleven percent of the total units in Jonesboro are vacant and thirteen percent of the total units in West Sanford are vacant. Therefore, one can reasonably assume that the vacant units in each township are comparable.

TABLE 6
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Township (3) Cape Fear
(includes Broadway)

Detail Description	Sound	Deteriorating	Dilapidated	Total
<u>#Occupied Units</u>	485	101	93	679
Single Family Units	485	101	93	679
Two or More Units	8	0	0	8
Mobile Homes	84	5	0	89
Total Units	577	106	93	776
<u>#Vacant Units</u>	0	4	26	30
Single Family Units	0	4	26	30
Two or More Units	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	0	4	26	30
<u>Summary Description</u>	<u>#Sound & %</u>	<u>#Deteriorating & %</u>	<u>#Dilapidated & %</u>	
Total Units Occupied	557-74%	106-14%	93-12%	
Total Units Vacant	0-0%	4-13%	26-87%	
Total Units	557-71%	110-14%	119-15%	
Total Units Occupied	776 or 96%			
Total Units Vacant	30 or 4%			
Total Units	806 or 100%			

Capefear Township

The Cape Fear Township which includes the town of Broadway has 806 housing units of which 29% of the housing units are substandard (deteriorating and dilapidated). The only other comparing township is Pocket, containing 879 units and has 33% substandard units. Both townships are reasonably comparable in number of units and percent substandard. Judging from the percent of substandard housing in each township, one can assume that the housing conditions are not greatly endangered but improvements are needed in both townships.

The availability of housing in each township is limited. Only four percent (4%) of the housing units in each township are vacant.

TABLE 7
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Township (4) Deep River

Detail Description	Sound	Deteriorating	Dilapidated	Total
<u>#Occupied Units</u>	173	40	72	285
Single Family Units	173	40	72	285
Two or More Units	0	0	2	2
Mobile Homes	93	0	0	93
Total Units	266	40	74	380
<u>#Vacant Units</u>	0	1	21	22
Single Family Units	0	1	21	22
Two or More Units	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	0	1	21	22
<u>Summary Description</u>	<u>#Sound & %</u>	<u>#Deteriorating & %</u>	<u>#Dilapidated & %</u>	
Total Units Occupied	266-70%	40-11%	74-19%	
Total Units Vacant	0-0%	1-5%	21-95%	
Total Units	266-66%	41-10%	95-24%	
Total Units Occupied	380 or 95%			
Total Units Vacant	22 or 5%			
Total Units	402 or 100%			

Deep River Township

Deep River Township, containing 402 housing units is the smallest township in the county. The township's substandard housing (deteriorating and dilapidated) yields 34%. The percent of substandard housing in this township is second to the Greenwood township comprising 40% substandard units. It is evident that housing improvements are needed in each township.

The total vacant units in the Deep River township number 22 or 5%. This indicates that housing availability is limited, especially when 21 of the 22 vacant units are dilapidated.

TABLE 8
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Township (5) East Sanford
(includes part of Sanford)

Detail Description	Sound	Deteriorating	Dilapidated	Total
<u>#Occupied Units</u>	1007	203	124	1334
Single Family Units	1007	203	124	1334
Two or More Units	0	0	0	0
Mobile Homes	48	3	0	51
Total Units	1055	206	124	1385
<u>#Vacant Units</u>	192	37	21	250
Single Family Units	192	37	21	250
Two or More Units	0	0	0	0
Mobile Homes	0	0	0	0
Total Units	192	37	21	250
<u>Summary Description #Sound & % #Deteriorating & % # Dilapidated & %</u>				
Total Units Occupied	1055-76%	206-15%	124-9%	
Total Units Vacant	192-77%	37-15%	21-8%	
Total Units	1247-76%	243-15%	145-9%	
Total Units Occupied	1385 or 85%			
Total Units Vacant	250 or 15%			
Total Units	1635 or 100%			

East Sanford Township

This township contains 1,635 housing units and is the third largest township in the county. East Sanford's substandard housing units (deteriorating and dilapidated) yields 24%. West Sanford has 1,990 housing units of which 335 or 17% of the housing units are substandard. It is evident that substandard housing does exist in both townships except that the percent of substandard housing is slightly higher in East Sanford.

The availability of housing units in each township are reasonably comparable. In East Sanford 15% of the total units are vacant and 13% of the units are vacant in West Sanford. It is evident that housing is available in each township except that it is slightly higher in East Sanford. Also, East Sanford has the highest percent of vacant units in the county.

TABLE 9
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Township (6) West Sanford
(includes part of Sanford)

<u>Detail Description</u>	<u>Sound</u>	<u>Deteriorating</u>	<u>Dilapidated</u>	<u>Total</u>
<u>#Occupied Units</u>	1362	157	128	1647
Single Family Units	1362	157	128	1647
Two or More Units	0	0	1	1
Mobile Homes	79	2	0	81
 Total Units	 1441	 159	 129	 1729
<u>#Vacant Units</u>	214	22	25	261
Single Family Units	214	22	25	261
Two or More Units	0	0	0	0
Mobile Homes	0	0	0	0
 Total Units	 214	 22	 25	 261
<u>Summary Description #Sound & % #Deteriorating & % #Dilapidated & %</u>				
Total Units Occupied	1441-83%	159-9%	129-8%	
Total Units Vacant	214-82%	22-8%	25-10%	
 Total Units	 1655-83%	 181-9%	 154-8%	
Total Units Occupied	1729 or 87%			
Total Units Vacant	261 or 13%			
 Total Units	 1990 or 100%			

West Sanford Township

West Sanford has a total of 1,990 housing units of which 335 or 17% of the units are substandard (deteriorating and dilapidated). Jonesboro, the largest township in the county contains 2,321 housing units of which 382 or 17% of the units are substandard. One can assume that both townships do not have high percentages of substandard housing. Therefore, the housing conditions in both townships are considered the best in the county.

West Sanford's vacant units number 261 or 13% and in Jonesboro the units number 262 or 11%. The percentages of vacant units in both townships are comparable. This also indicates that housing is available in both townships except that the percentage of vacant units in West Sanford is slightly higher.

TABLE 10
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Township (7) Pocket
(includes part of Sanford)

<u>Detail Description</u>	<u>Sound</u>	<u>Deteriorating</u>	<u>Dilapidated</u>	<u>Total</u>
<u>#Occupied Units</u>	500	136	106	742
Single Family Units	500	136	106	742
Two or More Units	0	0	0	0
Mobile Homes	90	11	3	104
Total Units	590	147	109	846
<u>#Vacant Units</u>	0	0	32	32
Single Family Units	0	0	32	32
Two or More Units	0	0	1	1
Mobile Homes	0	0	0	0
Total Units	0	0	33	33
<u>Summary Description #Sound & % #Deteriorating & % #Dilapidated & %</u>				
Total Units Occupied	590-70%	147-17%		
Total Units Vacant	0-0%	0-0%		
Total Units	590-67%	147-17%		
Total Units Occupied	846 or 96%			
Total Units Vacant	33 or 4%			
Total Units	879 or 100%			

Pocket Township

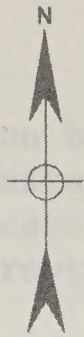
Pocket township contains 879 housing units and is the third smallest township in the county. The township's substandard housing numbers 286 units or 33% and ranks third in percent of substandard housing in the county.

TABLE 11
SURVEY OF HOUSING CONDITIONS

(August, 1976)

Summary: Lee County

<u>Detail Description</u>	<u>Sound</u>	<u>Deteriorating</u>	<u>Dilapidated</u>	<u>Total</u>
<u>#Occupied Units</u>	5566	959	824	7349
Single Family Units	5566	959	824	7349
Two or More Units	16	0	4	20
Mobile Homes	626	53	11	690
 Total Units	 6208	 1012	 839	 8059
<u>#Vacant Units</u>	617	82	192	891
Single Family Units	617	82	192	891
Two or More Units	0	0	1	1
Mobile Homes	0	0	0	0
 Total Units	 617	 82	 193	 892
 <u>Summary Description #Sound & % #Deteriorating & % #Dilapidated & %</u>				
Total Units Occupied	6208-77%	1012-13%	839-10%	
Total Units Vacant	617-69%	82-9%	193-22%	
 Total Units	 6825-76%	 1094-12%	 1032-12%	
Total Units Occupied	8059 or 90%			
Total Units Vacant	892 or 10%			
 Total Units	 8951 or 100%			



**POCKET
STANDARD
SUBSTANDARD**

CHATHAM

RIVER

42

DEEP

LITTLE

GOVERNORS

CREEK
MOORE

COUNTY

LEE COUNTY

NORTH CAROLINA

DEEP RIVER

STANDARD 48%

SUBSTANDARD 34%

WEST SANFORD

CAPE FEAR

STANDARD 71%

SUBSTANDARD 59%

EAST SANFORD

STANDARD 71%

SUBSTANDARD 59%

JONESBORO

STANDARD 83%

SUBSTANDARD 67%

GREENWOOD

STANDARD 80%

SUBSTANDARD 60%

EXISTING HOUSING CONDITIONS
BY TOWNSHIP

1987

TABLE 11
SURVEY OF HOUSING CONDITIONS

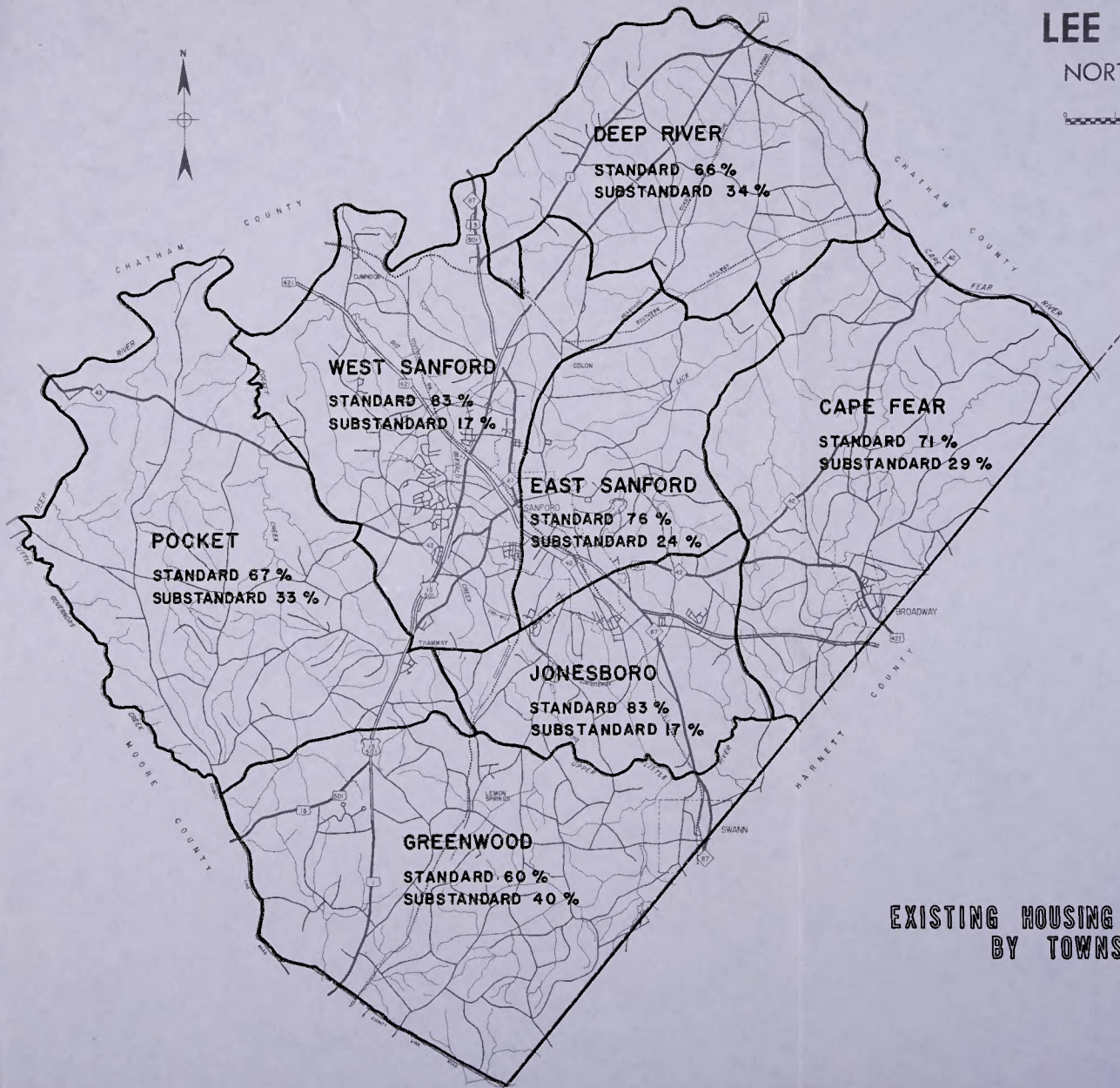
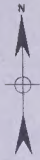
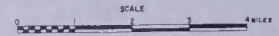
(August, 1976)

Summary: Lee County

<u>Detail Description</u>	<u>Sound</u>	<u>Deteriorating</u>	<u>Dilapidated</u>	<u>Total</u>
<u>#Occupied Units</u>	5566	959	824	7349
Single Family Units	5566	959	824	7349
Two or More Units	16	0	4	20
Mobile Homes	626	53	11	690
 Total Units	 6208	 1012	 839	 8059
<u>#Vacant Units</u>	617	82	192	891
Single Family Units	617	82	192	891
Two or More Units	0	0	1	1
Mobile Homes	0	0	0	0
 Total Units	 617	 82	 193	 892
 <u>Summary Description #Sound & % #Deteriorating & % #Dilapidated & %</u>				
Total Units Occupied	6208-77%	1012-13%	839-10%	
Total Units Vacant	617-69%	82-9%	193-22%	
 Total Units	 6825-76%	 1094-12%	 1032-12%	
Total Units Occupied	8059 or 90%			
Total Units Vacant	892 or 10%			
 Total Units	 8951 or 100%			

LEE COUNTY

NORTH CAROLINA



EXISTING HOUSING CONDITIONS
BY TOWNSHIPS

The comparison below shows increases and decreases in number of housing units in each township from 1970 to 1976. It appears that the Jonesboro Township is the most aggressive township with respect to growth in housing.

NUMBER OF DWELLING UNITS - 1970 AND 1976

<u>Township</u>	<u>1970 Census</u>	<u>1976 Housing Survey</u>
Greenwood	774	918
Jonesboro	1869	2321
Cape Fear	633	806
Deep River	410	402
East Sanford	1872	1635
West Sanford	3482	1990*
Pocket	720	879

The following map depicts by township, the housing conditions in Lee County.

* This discrepancy is due to annexation by the City of Sanford between 1970 and 1976.

C. Residential

There are many factors that influence residential development. Some of those key factors are: suitability of the soil for construction; and the availability of community facilities. Other relevant factors are convenience to place of work, schools, shopping, churches and other community services.

Again, referring to the land use survey conducted by the Division of Community Assistance in August, 1976, it was determined that the predominant housing type is the single family detached dwelling. The majority of the rental, multi-family units are in Sanford or near the fringe of it's one mile extraterritorial jurisdiction. Many of the rental rural units are being abandoned as tenants move away from the farms.

There are a number of trailers or mobile homes in the county. Most of these are concentrated in or near Sanford, but they are also scattered throughout the rural portion of the county. Mobile homes in rural areas are used by farm residents as replacements for deteriorated or otherwise obsolete housing and by nonfarm people.

Fortunately, the county adopted a mobile home park ordinance in 1976. The ordinance is geared to assure the health and welfare of mobile home occupants and surrounding property owners.

The majority of the Lee County residents live either in Sanford or in the suburban areas adjacent to Sanford. Most new residential development is taking place in suburban subdivisions near Sanford. The town of Broadway has grown in the past ten (10) years and will probably continue to grow. However, the center of activity is Sanford and people will continue to locate in the closest and most convenient area suiting their particular requirements.

There are several rural communities such as Osgood, Tramay, Carolina Trace, Tempting, New Hope, Lemon Springs, Northview, Colon, Cumnock and Deep River that are experiencing development. Of these communities, Carolina Trace appears to have more housing development occurring. It is expected that this community will become the largest community in Lee County in the very near future.

D. Commercial and Services²⁰

Much of the commercial and service areas in Lee County are centered in and around the fringe areas of Sanford. Within Sanford's central business district, there are several shopping stores with a wide variety of goods and services that have attracted shoppers from various areas in the county and adjoining counties for many years. The majority of the stores that make up Sanford's central business district were under construction during the 1890s and was completed during the 1960s. Presently, Sanford is in the process of revitalizing its central business district. This is a must if the town wants to continue to attract the shoppers needed to remain a major shopping center for the county and adjoining counties. Therefore, it is evident that the majority of Sanford's central business district is old and revitalization is apparent. Within Sanford's revitalization plan, more parking facilities should be provided to accommodate more people in the downtown area.

Broadway, the only other incorporated town in Lee County, has a fair amount of commercial and service areas. The town's commercial and service areas are concentrated along Main Street or the center of the town and along NC Highway 42 when entering town. Broadway has several convenient stores, a large grocery store, retail stores, auto service stations and sales, doctors, dentists, a small medical center, realtor, attorneys, a branch bank, restaurants, offices and a drug store. Presently, Broadway serves the town and nearby neighborhoods. It is expected that as the eastern portion of the county develops, Broadway will be a major shopping center for eastern Lee County and part of Harnett County.

In the rural areas of the county, commercial and service areas are located mainly along US Highway 15-501, US Highway 421, NC Highway 42 and NC Highway 87. US Highway 15-501 appears to be heavily congested with commercial and service activities. Other areas in the county that have small shopping facilities are Northview, Lemon Springs, Tramway and Cumnock.

As suburban development continues in the county, additional neighborhood shopping areas will be necessary. There may be pressure to develop more major shopping centers, but this should be discouraged to ensure the continued vitality of downtown Sanford. Highway oriented business should be planned and carefully regulated to protect and maintain the major investments made in the highways. This will also prevent traffic congestion problems in the near future.

²⁰ DNER/DCA Land Use Survey, 1976 and Sanford's Chamber of Commerce, 1977.

E. Industry

Adequate sites for locating industry depend on several major factors such as large, relatively level tracts of land, the availability of water and sewer and the accessibility of both highway and railroad if possible.

In recent years, it has become increasingly difficult to acquire adequate tracts of land suited for industrial development because much of this prime land has been taken by older industries. Therefore newer industries like the Roberts Company are locating and/or expanding within proximity (2 miles away) of Sanford and have recently been provided with water services from Sanford. This type of practice is on the increase and if this is not controlled, industry will continue to locate where community facilities will be provided even if means intruding on residential land.

Since 1967, the Chamber of Commerce reported that 23 industrial firms have located in Lee County. This means that 2.3 industrial firms have located in Lee County over the past 10 years. Without a doubt this is an excellent record and has enhanced the job market and provided more tax revenues for the county. However, it should be reiterated that industry continues to locate wherever suitable land is available and there should be a concerted effort to establish a central location for locating industries. Presently, the County is entertaining the idea of establishing an industrial park.

F. Transportation

Land Use Planning in North Carolina (August, 1973) indicated that the county's road system is basically primary and secondary with no interstate highways. The table below shows that the majority of the county's road system is secondary.

TABLE 12
EXISTING ROAD SYSTEM²¹

	<u>Interstate</u>		<u>Primary</u>		<u>Secondary</u>	
	<u>Rural</u>	<u>Municipal</u>	<u>Rural</u>	<u>Municipal</u>	<u>Rural</u>	<u>Municipal</u>
Miles	0	0	68.24	10.87	358.10	19.16
Acres	0	0	827.07	131.74	2,603.39	139.29

During the land use survey in August, 1976, it was determined that Lee County's transportation system is good. The system includes a network of U.S. Highways, N.C. Highways, State Roads and three railroads that lead to and from adjoining counties. Also, the system includes a municipal airport located in the southern section of Sanford. Plans are in the process for upgrading the airport and extending its runway to accommodate larger aircrafts.

²¹ Land Use Planning in North Carolina, August, 1973

The county's transportation system has and is continuously improving. U.S. 1 Highway Bypass was completed in recent years. According to the Department of Transportation, plans and construction are under-way for relocation of U.S. 421. Relocation of U.S. 421 will begin 325 feet east of N.C. 87 near Sanford to existing U.S. 421, 1830 feet east of SR 1208 near Seminole. The length of the highway will be 5.7 miles when completed. This project is scheduled to be completed by November 1, 1977. It was also observed during the survey that several unpaved county roads have been paved.

G. Cultural (Entertainment and Recreation)

The Recreation Enabling Law of North Carolina defined recreation as those activities that are diversionary in character and aid in promoting entertainment, pleasure, relaxation, instruction, and other physical, mental and cultural development and leisure time experiences. Furthermore, the law encourages recreational opportunities for all ages.

Unlike many counties throughout the state, Lee County has a recreation department with diversified recreational activities and programs geared to address the needs of all Lee Countians. However, there is a possibility that the county may need to extend more recreational opportunities to the elderly in the future. The section on Population by Age Group and Projections in this study indicate that the elderly population has increased since 1950 and will continue to increase. Therefore, special recreational activities and programs will be needed for the elderly.

According to a study entitled Recreation and Park Analysis prepared by NER/Recreation Division for Lee County in 1974, the Recreation Department maintains 35 indoor and outdoor facilities which comprise approximately 330 acres. The following is a list of recreational facilities maintained by Lee County's Recreation Department.

LEE COUNTY RECREATION DEPARTMENT
FACILITIES

I. Owned by Recreation Department

<u>Name</u>	<u>Location</u>	<u>Acres</u>	<u>Outdoor Facilities</u>	<u>Indoor Facilities</u>
Park Avenue Park	Sanford	6	Pool, playground, tiny tot area, 6 tennis courts (4 lighted), paved basketball court, picnicking, shelter.	Utility, equipment, program building, bathhouse
Dalrymple Park	Sanford	7	2 lighted tennis courts, lighted little league baseball field, playground, tiny tot area, paved basketball court, softball field	Recreation center
Armory	Sanford			Recreation center
Temple Park	Sanford	6	2 lighted soft-ball fields, combination football field, paved basketball court	Utility building
Third Street Park	Sanford	3.5	Playfields, playground, picnicking, shelter	Utility building
Seventh Street Park	Sanford	2.8	Playground, picnicking, shelter	
Sloan Park	Sanford	43.46	2 pools, tennis courts, 2 softball fields, bathhouse, basketball court, picnicking	
Floyd Knight	W. Sanford Township	13	Undeveloped	
Sunset Street Park	Sanford	0.4	Sightseeing	
Walnut Street Park	Sanford	0.3	Sightseeing	
Horton Park	Washington Avenue	28	Pool, tennis court, basketball court, playground, tiny tot area	Bathhouse, utility building

II. Leased by Recreation Department

<u>Name</u>	<u>Location</u>	<u>Acres</u>	<u>Outdoor Facilities</u>	<u>Indoor Facilities</u>
Health Club	Sanford			Lockers, shower, exercise apparatus, steam room, whirlpool
Jonesboro Presbyterian Church	Sanford		Tiny tot area	Accommodations for tiny tot program
Lake Watson	Broadway		Playground, picnicking, tiny tot area	Utility building
Broadway Methodist Church hut	Broadway			Accommodations for tiny tot program

III. Used and Maintained by Recreation Department

Buchanan Park	Sanford	5	Lighted ball-field	Utility building, (concession and restrooms)
Lions Park	Colon	2	Lighted Junior League ballfield	
Optimist Park	US 1		Lighted ballfield	Restrooms and concession

IV. Loan or Rented to Recreation Department

Central High	Sanford	77	Football stadium regulation ball-field, track	Gym
Jonesboro Elementary	Sanford	35	Playfield, playground	Gym
Greenwood School	Lemon Springs	18	Tennis courts, play-ground, lighted ball field, regulation ballfield	Gym
Broadway School	Broadway	8	Playground, regulation ballfields, 1 Little League ballfield	Gym
Deep River School	US 1	12	Playground, regulation ballfield	Gym
Mental Health Building				Gym, office suite
Gilmore Terrace	Sanford		Basketball court	Recreation center
Matthews Court	Sanford			Recreation center
Shallow Well Court	Shallow Well Community		Ballfield	
Jaycee Hut	Broadway			Slimnastics program facilities

IV. Loan or Rented to Recreation Department (Contd.)

<u>Name</u>	<u>Location</u>	<u>Acres</u>	<u>Outdoor Facilities</u>	<u>Indoor Facilities</u>
Jonesboro Middle School	SR 1527		Playfield	
WB Wicker School	Sanford	25	Playfield, regulation ballfield	Gym
Sanford Middle School	Sanford	6	Playfield	
Warren Williams School	Sanford	17	Playfield	
McIver School	Sanford	4	Playground	
StClair School	Sanford	5	Playground	
Floyd Knight	Sanford	12	Playground	

V. Community Centers - Owned and Managed by the Individual Community Organization

Deep River	US 1 N	Meeting room, kitchen, rest-rooms
Northview	Northview	Meeting room, kitchen, rest-rooms
Carbonton	NC 42 W	Meeting room, kitchen, rest-rooms
Beaver Creek	SR 1166	Meeting room, kitchen, rest-rooms
Hunt Springs	SR 1146	Meeting room, kitchen, rest-rooms
Grape Vineyard	Grape Vineyard Road	Meeting room, kitchen, rest-rooms
Dignus Clubhouse	Jonesboro	Meeting room, kitchen, rest-rooms

On January 1, 1976 Lee County Commissioners agreed to purchase 89.2 acres of land at the site of the old city (Sanford) water pumping station to create a public park. The park is scheduled to be completed within 36 months of purchasing date.

This large facility will comprise a small parking area at its entrance along with a pavillion and restrooms. One side of the park will be reserved for nature trails and primitive campsites will be constructed on the opposite end. The park will be fenced and closed at night and there will be access ramps to the lakes for small row-boats, canoes and small sailboats. No power boats will be permitted on the lakes, according to plans. Living quarters for the caretaker of the park will be established on a hill overlooking the park near its entrance.

22

H. Water and Sewer

Safe, dependable water supplies and satisfactory treatment and disposal of liquid wastes are increasingly important in rural areas as well as towns and cities. More water is required for homes and industrial use, and greater volumes of water are used to carry wastes to treatment and disposal facilities. In the past, low density residential development, using small volumes of water and producing small quantities of sewage, could generally depend on individual wells and septic tanks. However, soil and ground conditions often limit the availability of water and effectiveness of septic tanks. In Lee County, ground water is neither of good quality or adequate quality except in the southeastern portion. Soils in the northern two-thirds of the county are also not generally well suited for septic tank filter fields. Because most of Lee County is within the Triassic geologic formation, Triassic soils do not yield high quantities of groundwater nor do septic tank filter fields perform adequately. Where residents must depend on both individual wells and septic tanks, contamination by septic tank effluent of the groundwater supply is an added danger. It is necessary to provide adequate treatment and disposal of sewage to prevent contamination of both surface water and groundwater.

Generally, urban and suburban development requires both piped water supplies and sewerage systems. This is especially true in Lee County where conditions are not favorable for either wells or septic tanks. However, three different approaches may be taken. Sewerage systems may be developed to protect the groundwater supply if it is adequate for anticipated usage. Piped water systems may be developed for a safe, dependable water supply while continuing to use septic tanks for sewage disposal. Or both water and sewerage systems may be developed. Since groundwater supplies in Lee County are not very good and soils will tolerate septic tanks for a few years, the general approach recommended is to provide a piped water supply for most of the county as soon as possible.

It is generally easier to pipe water supplies than to pipe and treat sewage. Water is piped under pressure, thereby using smaller pipes and not depending upon gravity flow lines from each user. Sewage is generally carried in gravity flow lines which require larger pipes and must be installed with a certain slope to assure gravity flow to

22 Soil Conservation Service, 1976 and Water Resource Management Study, Region J, 1977.

the treatment plant. Lift stations may be used to pump sewage to a treatment plant at a higher elevation or in a different drainage basin.

Sanford's Water System ²³

Sanford's raw water is pumped from the Cape Fear River near where NC Highway 42 crosses the Cape Fear River for treatment. The treatment plant, placed in operation in 1972, has a treatment capacity of 6 million gallons per day (MGD) and has a potential to treat 12 MGD. The finished water is stored in a 2 million gallon (MG) clear well and 4 elevated storage tanks with a combined holding capacity of 1.7 MG. A new elevated storage tank with a holding capacity of 0.5 MG is under construction.

Presently Sanford's water system serves approximately 20,000 people. This figure includes people in Lemon Springs and the Northview community. The community of Cumnock is not included. Its treated water is purchased from the Goldston-Gulf water system in Chatham County. Also, Sanford and Lee County have drawn up corporative agreements to extend water to industries outside of Sanford. This continued practice will result in strip industrial development along the existing lines in the county. Therefore, policy on use of waterlines should be placed on existing and future waterlines with emphasis on limiting or disallowing industrial connections.

Sanford's Wastewater System ²⁴

Sanford has two wastewater treatment facilities, the Jonesboro facility which discharges into Gastens Creek and the Big Buffalo Creek facility which discharges into the Deep River. Both systems comprise 317,000 linear feet of lines located in and around the fringe areas of Sanford except for a 6" line extended into the county for three miles along NC Highway 87 North. Both systems have a combined treatment capacity of 5.3 MGD. However, the Jonesboro facility, designed to treat 0.3 MGD has been deemed hydraulically overloaded and is not providing adequate treatment.

Sanford's Proposed Wastewater Improvements

Sanford's 201 sewer facility plan has been approved and certified by North Carolina and the U. S. Environment Protection Agency. The 201 Plan includes; abandoning the old Jonesboro facility and channeling all wastewater to the new Big Buffalo facility; and rehabilitation the Jonesboro sewer lines.

²³ Water Resource Management Study, Region J, 1977 and Lee County's Community Facilities, 1968.

²⁴ Greater Sanford 201 Wastewater Facilities Plan, 1975
Water Resource Management Study, Region J, 1977

Broadway's Water System 25

The Town of Broadway has a water system which was completed in 1966. The Broadway system uses two wells for its supply and has one elevated storage tank with a capacity of 100,000 gallons. Recently the town drilled a third well but the well was disbanded because it contained high contents of iron, manganese and coliform bacteria. It is suggested that the town might locate water at the most southern point of its one mile area for future needs or eventually connect to Sanford's water system.

Broadway's Wastewater Disposal 26

The Town of Broadway does not have a sewerage system. Wastewater is disposed through individual septic tanks.

Broadway's Proposed Wastewater Improvements 27

Broadway is located in Sanford's 201 Facility Planning area. The 201 Plan offers Broadway a wastewater treatment system. The system will be designed to have a treatment capacity of 120,000 gallons per day. It is to be located on Daniel's Creek, east of town.

Carolina Trace, Water and Sewer 28

Residents from the Carolina Trace Community own their water system. Also, the community owns a small package plant which treats only domestic waste from the development and discharges below the Carolina Trace Lake into the Upper Little River. However, it is recommended that the community connect to Sanford's water system to defray higher cost for water services in the future.

Communities in Need of Water Services 29

There are five rural communities that are in need of water services. Those communities are Osgood, Tramway, Tempting, New Hope and Poplar Springs. Some of the wells in the communities are shallow, open-top dug wells. These type wells warrant contamination. The community that appears to suffer most from this problem is the Osgood Community. Therefore, it is recommended that this community receive first priority for water services.

25 Greater Sanford 201 Wastewater Facilities Plan, 1975

Water Resource Management Study, Region J, 1977

26 Greater Sanford 201 Wastewater Facility Plan, 1975

27 Ibid

28 Ibid

29 NER/DCA Land Use Survey, August, 1976

I. Undeveloped Land

Undeveloped land includes land not used for urban purposes, such as crop and pasture lands and forest land.

1. Crop and Pasture Land: According to Land Use Planning in North Carolina, August, 1973, crop and pasture lands comprised 37,757 acres which represent 23% of the land area in Lee County. Cropland is expected to decrease in the near future. Industrial development and residential development compete for much of this prime cropland because level land with good drainage is very desirable for development.

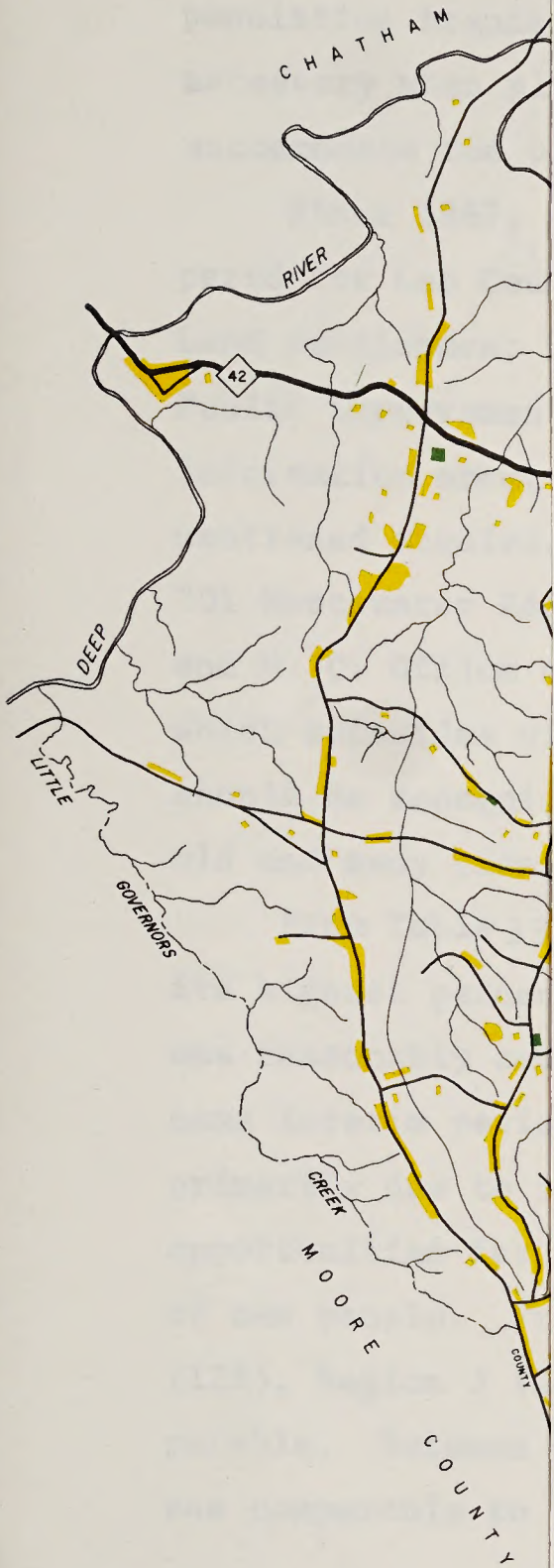
The majority of the prime cropland is located in the Coastal Plains section which is in the southern part of the county. The soils and topography in this are better suited for agricultural uses.

The cropland in this area should be protected against intrusion of incompatible uses because the amount of land is limited. Once this land is developed, it will be lost forever.

2. Forest Land: The land consists of 111,292 acres or 68% of the land area according to Land Use Planning in North Carolina (August, 1973). The newer residential subdivisions near Sanford are in forested areas. Forested areas along the Cape and Deep Rivers have recreational potential and should be developed for those purposes.

J. Existing Land Use

In the process of preparing the section on Development Factors, key existing land use factors have been discussed, analyzed, and recommendations have been made. At this point, it becomes apparent to graphically depict the existing land uses in Lee County. Therefore, the following map represents the existing land uses in the county.



LEE COUNTY NORTH CAROLINA

EXISTING LAND USE

RESIDENTIAL	
COMMERCIAL	
RECREATION	
CULTURAL/ENTERTAINMENT	
INDUSTRIAL	
TRANSPORTATION/COMMUNICATION	
UTILITIES	
UNDEVELOPED LAND	

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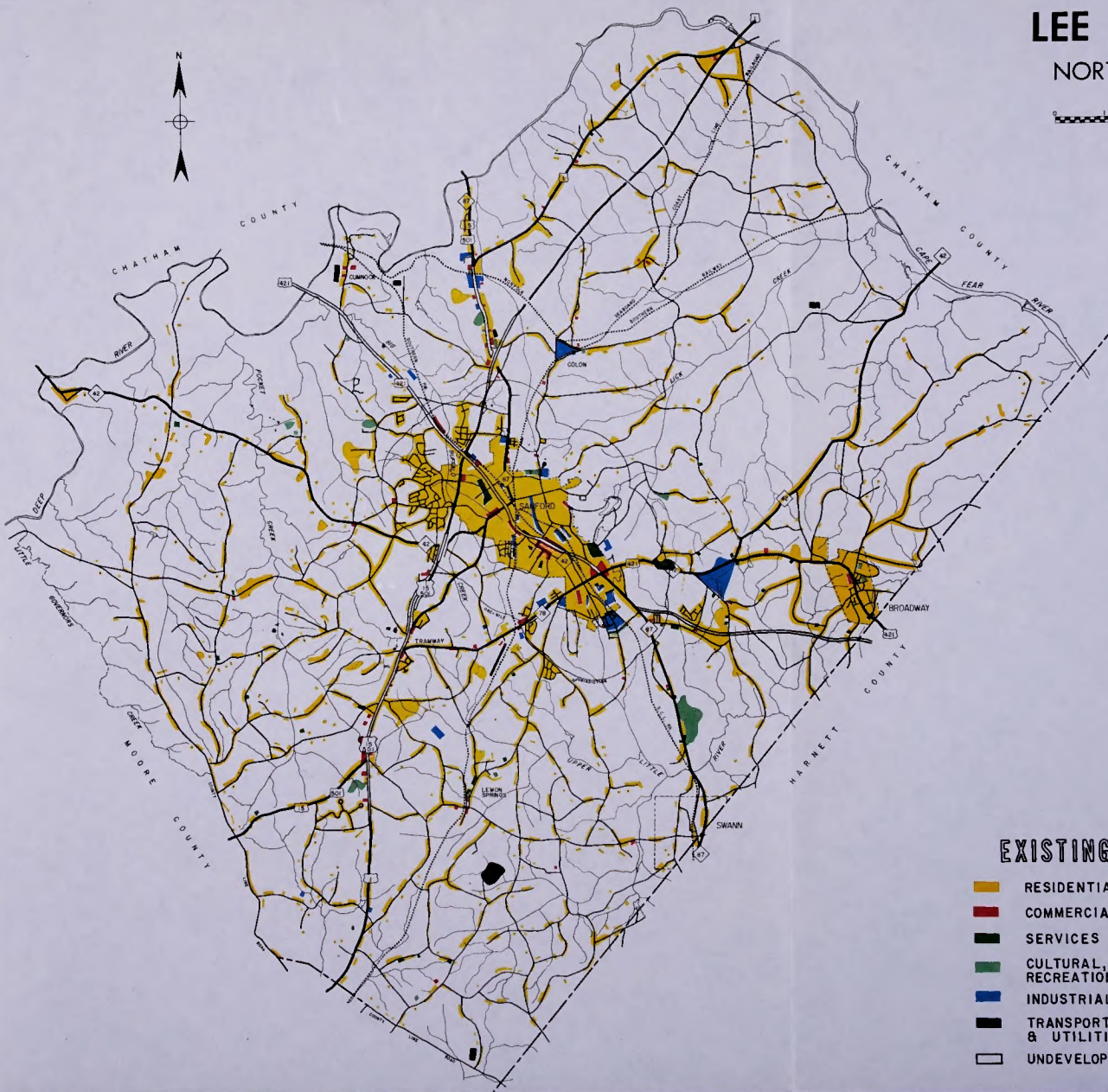
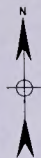
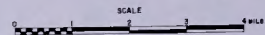
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LEE COUNTY

NORTH CAROLINA



EXISTING LAND USE

- RESIDENTIAL
- COMMERCIAL
- SERVICES
- CULTURAL, ENTERTAINMENT, & RECREATION
- INDUSTRIAL
- TRANSPORTATION, COMMUNICATION, & UTILITIES
- UNDEVELOPED LAND

VI. Population and Economy

A. Existing Population and Trends

The analysis of an area's population and growth trends will help determine the adequacy or inadequacy of facilities needed to serve the people in an area. By examining the county's past population trends, it helps project future populations which are necessary when planning for the facilities or resources needed to accommodate the people in future years.

Since 1967, the following land use studies have been prepared for Lee County: Potential For Development (December, 1967), Land Development Plan (June, 1968) and Community Facilities/Public Improvement Program (September, 1968). The source of information about population was extrapolated from the aforementioned studies. Other sources of information included: Sanford's 201 Wastewater Facility Plan; the U. S. Census of Population; and N. C. Office of State Planning/Region J Population Forecast which coincides with Sanford's 201 Wastewater Facility Plan. It should be recognized that data from the 1970 Census is 7 years old and many changes have taken place since that time.

From Table 13, it can be seen that Lee County experienced its highest percent of growth (25%) between 1940 and 1950. This was reasonably comparable to Region J which was 21% during the same interim period. The population growth in the county is primarily due to industrial development which provides better job opportunities for existing residents and warrants in migration of new people. From 1950 to 1960, growth trends in North Carolina (12%), Region J (14%) and Lee County (13%) were relatively comparable. Between 1960 and 1970, Lee County's growth was 15% which was comparable to the State's 12% growth increase.

Lee County's 1970 population was 30,467. It was forecasted in December, 1967 in a study called "Potential For Development" for Lee County that the county would reach a population of almost 31,000 according to traditional trends by 1970. The 1970 population is reasonably comparable to the forecast.

30

State, Region and County Population Trends

Table ¹³	1940	1950	1960	1970
North Carolina	3,571,623	4,061,929	4,556,153	5,082,059
% Change		14%	12%	12%
Region J	320,137	387,344	440,329	540,599
% Change		21%	14%	23%
Lee County	18,743	23,522	26,561	30,467
% Change		25%	13%	15%

B. Short Term Population and Projections (10 years)

The Jonesboro Township is the second largest township and appears to be the fastest growing township in the county. Jonesboro is almost averaging 10% in growth every 5 years. It is expected that this township will continue to be a non-farm rural township. The steady growth in Jonesboro is probably due to an immaculate housing development named Carolina Trace. This development contains approximately 1,700 acres and 300 constructed houses. Authorities at Carolina Trace indicated that they expect to have approximately 1,200 constructed homes by 1980. Also, a 12 inch water line passes through Jonesboro along the Lemon Springs Road. This could encourage industrial strip development if not controlled.

According to Table 14, West Sanford is the most populous township in the county. The township had a 1970 population of 10,656

30 Historic Population, 1940-1970, U. S. Bureau of Census

and by 1985 it is expected that the township will grow to 13,405 and continue to be the largest township. West Sanford's growth is primarily due to housing development located within proximity of Sanford's extraterritorial boundary.

East Sanford is the third largest township in the county with a 1970 population of 5,848 and an expected population of 7,215 by 1985. Its growth is primarily due to housing development along the fringe areas of Sanford. Also, a 12 inch water line is extended $1\frac{1}{4}$ mile from Sanford along the Grapevineyard Road. This water line may attract home builders, also industry and commerce if not properly controlled.

The Cape Fear Township comprises 2,005 inhabitants and is second to Deep River which is the smallest township in the county. According to Table II, Cape Fear's population is expected to decrease to 1,784 by 1985. Much of this rural farm township is hilly pasture land and offers limited potential for development. The primary cause of decrease in population is outward migration to the more affluent townships that offer better community facilities.

Table 14

Short Term Population Projections and Percent Change (10 years) 1970 - 1985							
TOWNSHIPS	31 1970	32 1975	% Change	31 1980	% Change	32 1985	% Change
Greenwood	2,537	2,530	-.28	2,524	-.24	2,531	.2%
Jonesboro	5,878	6,485	10%	7,093	9%	7,801	10%
Cape Fear	2,005	1,897	- 5%	1,807	- 5%	1,784	-1%
East Sanford	5,848	6,317	8%	6,787	7%	7,215	6%
West Sanford	10,656	11,468	8%	12,281	7%	13,405	9%
Deep River	1,318	1,240	6%	1,262	2%	1,280	1%
Pocket	<u>2,425</u>	<u>2,429</u>	<u>.16%</u>	<u>2,433</u>	<u>.16%</u>	<u>2,526</u>	<u>4%</u>
Lee County Total	30,667	32,366		34,187		36,542	
% Change		5%		6%		7%	
City of Sanford	11,716	14,708	25%	17,700	20%	19,550	10%
Town of Broadway	694	787	13%	880	12%	974	11%

31 Greater Sanford 201 Wastewater Facility Plan, February, 1975

32 DNER/Division of Community Assistance (Estimates), 1977

C. Population by Age Group and Projections (refer to Table 15)

The type of services needed in an area is determined by the ages of people. The economic status of an area is determined by the productivity of the working age group. Future growth trends in an area will be altered by births, deaths and migration.

In Lee County, the 0 to 4 age group decreased and is expected to remain about 8% from 1970 through 1990. During 1950, this age group was at its highest peak. This was probably due to the "population explosion" which came after the end of World War II. The decrease in population is probably due to birth control.

The 5 to 19 age group fluctuated until 1970. It is expected that this group will begin to decline between 1980 and 1990. The reason for decline in population is probably due to controlled births within the 0 to 4 age group.

By 1990, it is expected that the 20 to 39 age group will represent 32% of the population as it did in 1950. This group can be considered the working productive group. In the future, these people will need more jobs and community facilities to facilitate their needs.

The 60 plus age group appears to have a steady but small increase. In 1950, this group represented 8% of the population. By 1990, it is expected that this group will represent 16% of the population. The majority of this age group are probably on fixed incomes and cannot compete with today's rising prices. This group necessitates additional health care, special housing facilities and recreation programs tailored to their needs.

Table 15

Population by Age Group and Projections

AGE GROUP	1950 ³³	%	1960 ³³	%	1970 ³⁴	%	1980 ³⁵	%	1990 ³⁵	%
0 - 4	3,006	(13%)	3,129	(12%)	2,590	(8%)	2,803	(8%)	3,328	(8%)
5 - 19	6,711	(29%)	8,276	(31%)	9,390	(31%)	9,334	(26%)	9,890	(23%)
20 - 39	7,573	(32%)	7,117	(27%)	7,936	(26%)	11,191	(31%)	13,782	(32%)
40 - 59	4,275	(18%)	5,462	(20%)	6,926	(23%)	7,728	(21%)	9,213	(21%)
60 +	<u>1,957</u>	(8%)	<u>2,577</u>	(10%)	<u>3,625</u>	(12%)	<u>5,295</u>	(14%)	<u>7,090</u>	(16%)
TOTAL	23,522		26,561		30,467		36,351		43,303	
PERCENT CHANGE	----		13%		14%		19%		19%	

33 Lee County, N. C., Potential For Development, 1967

34 Population Characteristics, U. S. Census, 1970

35 N. C. Office of State Planning, 1977

D. Black Population and Projections

In 1910, Blacks represented one-third of Lee County's population. From 1920 to 1940, the Black population in Lee County moderately fluctuated, receiving a slight increase in 1930 and slight decreases in 1920 and 1940. Between 1950 and 1960, the Black population experienced an actual decrease in population. This was primarily due to migration to northern states for better occupational and educational opportunities. However, in 1970, the Black population slightly increased from 22 to 23%.

From 1975 to 1990, it is expected that Lee County's Black population will decrease from 22% to 19%. There are many reasons for decline in the Black population. One possible reason is that many young Blacks are leaving the county to attend higher schools of learning (universities and colleges) which are normally located in large cities that offer diversified professional employment opportunities. Once school is completed, the Blacks normally obtain jobs and remain in those cities. (See Table 16.)

Table 16

Black Population and Projections

<u>YEAR</u>	<u>POPULATION</u>	<u>POPULATION</u>
1910 36	3,526	31%
1920 36	3,887	29%
1930 36	5,406	32%
1940 36	5,350	28%
1950 36	6,122	26%
1960 36	5,903	22%
1970 37	7,001	23%
1975 38	7,366	22%
1980 38	7,659	21%
1985 38	7,950	20%
1990 38	8,168	19%

36 Ibid

37 Ibid

38 Ibid

E. Long Term Population and Projections (25 years)

The majority of the townships in Lee County are growing except for the Cape Fear Township. According to Table 17, it is expected that the Cape Fear Township will lose approximately 9.2% of its population by year 2000. As mentioned earlier, the township's loss in population is probably due to the lack of job opportunities and the hilly character of the land which is basically pasture land. In general, the county and the towns (Sanford and Broadway) within Lee County are expected to increase at an average of 8% every five years.

Table 17

Long Term Population Projections
and
Percent Change (25 years) 1975 - 2000

TOWNSHIP	1975	39 % Change	1980	40 % Change	1985	39 % Change	1990	40 % Change	1995	39 % Change	2000	40 % Change
Greenwood	2,530	--	2,524	.28%	2,531	.31%	2,539	.47%	2,551	.47%	2,563	
Jonesboro	6,485	--	7,093	10%	7,801	9%	8,509	10%	9,325	9%	10,142	
Cape Fear	1,897	--	1,807	- 1%	1,784	- 1%	1,761	- 1%	1,742	- 1%	1,723	
East Sanford	6,317	--	6,787	6%	7,215	6%	7,644	6%	8,135	6%	8,627	
West Sanford	11,468	--	12,281	9%	13,405	8%	14,529	9%	15,824	8%	17,120	
Deep River	1,240	--	1,262	1%	1,280	1%	1,298	2%	1,318	2%	1,339	
Pocket	2,429	--	2,433	4%	2,526	4%	2,619	2%	2,675	6%	2,831	
Lee County Total	32,366	--	34,187		36,542		38,899		41,570		44,345	
Percent Change			6%		7%		6%		7%		7%	
City of Sanford	14,708		17,700	10%	19,550	9%	21,400	8%	23,200	8%	25,000	
Town of Broadway	787		800	11%	974	10%	1,068	9%	1,160	8%	1,252	

39 DNER/Division of Community Assistance (Estimates). 1977

40 Greater Sanford 201 Wastewater Facility Plan, February, 1975

F. Sanford-Lee County High School Graduates and Enrollment

Throughout this section, population has been discussed on a short and long term basis. However, there is one vital aspect that can alter or change future development of an area. That vital aspect is the education field. Those individuals graduating from high school and/or higher schools of learning will eventually be the threshold of an area and will determine the type(s) of development which will probably coincide with their educational backgrounds whether it be agricultural, (farming) or non agricultural (industrial).

According to Table 18, the public school system in Lee County graduated 319 students in 1960 and 451 in 1965 which was an increase of 132 students. From 1970 to 1975, high school graduates in Lee County fluctuated. Over the 15 year period, (1960-1975) the school system graduated 2,773 students. This represent 9% of the 1970 population (30,467) for Lee County.

Table 19 shows than an increase in enrollment for the selected years 1960, 1965, and 1970 and 1975. Lee County's enrollment for 1975 represent 26% of the county's 1970 population (30,467). In future years, enrollment is expected to increase. This will warrant an increase in graduates which will require more jobs for the county's increasing labor force.

Table 18

LEE COUNTY								PERCENT	
Public High School Graduates									
School Years Ending 1960, '65, '70 - '74									
1960	1965	1970	1971	1972	1973	1974	NUMBER	MALE	
319	451	445	430	439	490	477	492	49%	

SOURCE: N. C. Department of Public Education
Management Information System

Table 19

LEE COUNTY			
Public School Final Enrollment			
School Years Ending 1960, '65, '70 - '75			
1959-60	1964-65	1969-70	1974-75 ^a
6,994	7,686	7,847	7,947

a Figures for the 1974-75 school year include Kindergarten

SOURCE: N. C. Department of Public Education
Management Information System

An analysis of Table 20 reveals that the Lee County high school graduates chose to enter the Community Colleges, Technical Institutes, Trade, Business and Nursing schools more so than the Sanford City high school graduates. The Sanford high school graduates chose to enter into senior colleges in greater percentages than their rural counterparts. For the five year period from 1969 to 1973, at least 33 percent of the Sanford graduates entered senior colleges, while their rural counterparts chose to attend senior colleges on an average of 17 percent. On the other hand, Lee County graduates during the five year period from 1969 to 1973 chose to continue their education in junior colleges, and technical schools on an average of 41 percent of the total. At the same time, the Sanford graduates entered technical schools on an average of 27 percent of the total.

Further analysis of Table 20 shows that from an overall viewpoint, 60 percent of the Lee County and Sanford high school graduates continued their education, compared to a 58 percent average for county graduates statewide for the period from 1969 to 1973.

Lee County and Sanford graduates entered the military on an average of 3.6 students per year for the five year period.

During the same time period, 26 percent of the entire graduates became gainfully employed and 10 percent of the entire graduates gave no definite indication of their intentions after graduation. Agriculture and private business ventures probably accounted for a major portion of the 10 percent of all others.

An evaluation of 1975 Sanford Lee graduates (see Table 21) indicate that 61 percent of the graduates intended on continuing their education. The trend toward continuing education is increasing each year.

Table 20
FOLLOW-UP SURVEY OF 1969 - 1973 HIGH SCHOOL GRADUATES IN COUNTY AND CITY UNITS

Lee Sanford	Number of Graduates	Enrolled in Senior Colleges		Enrolled in Community Colleges & Technical Institutes		Enrolled in Junior Colleges		Enrolled in Trade Business & Nursing Schools		Entered Military Service		Number Gainfully Employed		All Others	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1969 L S	122 349	14 126	168 36.1	-- --	-- --	4 62	2.9 17.8	52 59	42.6 16.9	5 14	4.4 4.0	38 45	30.9 12.9	9 43	7.4 12.3
1970 L S	150 295	17 105	11.3 35.6	-- --	-- --	14 25	9.3 8.5	54 55	36.0 18.6	3 10	2.0 3.4	40 76	26.7 25.8	22 24	14.7 8.1
1971 L S	127 303	25 108	19.7 35.6	-- --	-- --	16 24	12.6 7.9	36 50	28.3 16.5	7 11	5.5 3.6	31 58	24.4 19.2	12 52	9.5 17.2
1972 L S	140 299	44 92	31.4 30.8	30 64	21.4 21.4	5 8	3.6 2.7	6 16	4.3 5.3	3 14	2.2 4.7	43 69	30.7 23.1	9 36	6.4 12.0
1973 L S	124 366	14 107	11.3 29.2	53 43	42.7 11.8	3 17	2.4 4.6	4 12	3.2 3.3	1 21	.8 5.7	40 147	32.3 40.2	9 19	7.3 5.2

(--) Data not available for these years

SOURCE: Division of Management Information Systems
Controller's Office, State Department of Public Education

TABLE 21

1975 HIGH SCHOOL GRADUATES INTENTIONS INCLUDING 1974 SUMMER SCHOOL

Sanford Lee

	MALE				FEMALE				TOTAL			
	WHITE	BLACK	OTHER*	TOTAL	PCT-MALE	WHITE	BLACK	OTHER*		TOTAL	PCT-FEMAL	NUMBER
PUBLIC SENIOR INST												
NORTH CAROLINA	44	5	0	49	20.2	51	9	0	60	24.0	109	22.2
OUT-OF-STATE	0	0	0	0	0.0	0	0	0	0	0.0	0	0.0
TOTAL	44	5	0	49	20.2	51	9	0	60	24.0	109	22.2
PRIVATE SENIOR INST												
NORTH CAROLINA	13	1	0	14	5.8	12	3	0	15	6.0	29	5.9
OUT-OF-STATE	4	0	2	6	2.5	1	0	0	1	0.4	7	1.4
TOTAL	17	1	2	20	8.3	13	3	0	16	6.4	36	7.3
COMM COLL, TECH INST												
NORTH CAROLINA	42	13	0	55	22.7	56	14	0	70	28.0	125	25.4
OUT-OF-STATE	0	0	0	0	0.0	0	0	0	0	0.0	0	0.0
TOTAL	42	13	0	55	22.7	56	14	0	70	28.0	125	25.4
PRIVATE JUNIOR COLL												
NORTH CAROLINA	1	2	0	3	1.2	8	0	0	8	3.2	11	2.2
OUT-OF-STATE	0	0	0	0	0.0	0	0	0	0	0.0	0	0.0
TOTAL	1	2	0	3	1.2	8	0	0	8	3.2	11	2.2
TRADE, BUSINESS, ETC.												
NORTH CAROLINA	3	4	0	7	2.9	7	7	0	14	5.6	21	4.3
OUT-OF-STATE	0	0	0	0	0.0	0	0	0	0	0.0	0	0.0
TOTAL	3	4	0	7	2.9	7	7	0	14	5.6	21	4.3
MI												
MILITARY	12	21	0	33	13.6	3	2	0	5	2.0	38	7.7
EMPLOYMENT	43	29	2	74	30.5	47	29	1	77	30.8	151	30.7
NO INFORMATION	1	0	0	1	0.4	0	0	0	0	0.0	1	0.2
GRAND TOTAL	163	75	4	242	100.0	185	64	1	250	100.0	492	100.0

* INCLUDES HISPANICS, AMERICAN INDIANS OR ALASKAN NATIVES, AND ASIAN OR PACIFIC ISLANDERS.

G. Economy

The economy of an area is primarily based on income and employment characteristics and various measures of output. (product oriented) This section briefly analyzes some of the characteristics and trends of Lee County's economy.

In 1970, Lee County's labor force numbered 14,180 and of that amount, 980 or 6.9% of the labor force was unemployed. That year marked the highest rate of unemployment for the county within a 4 year period. During 1971, the county's rate of unemployment was 6.3% which was very little change from 1970. High rates of unemployment during the two aforementioned years were probably due to the increase of the nation's inflationary period. However, in 1972, the rate of unemployment decreased to 3.6% which was almost half the rate in 1971 and remained almost the same in 1973 (3.2%). This was due to an extra effort to attract industry into the county. In 1974, the rate of unemployment increased to 5.1%. This was due to the impact of inflation even though the county continued to make an extra effort to attract industry. Lee County's rate of unemployment has been relatively high in certain years, however, the county's accumulative labor force increased 1,860 persons or 13% over a period of 4 years.

According to Table 22 agricultural employment averaged 600 persons in 1974 and non-agriculture employment averaged 12,000 persons in 1974. This is a clear indicator that the county is not heavily dependent on agriculture.

According to Table 22 in 1974 there were 7,230 persons employed in manufacturing jobs and 7,830 persons employed in non-manufacturing jobs. This high percentage of workers employed in manufacturing attests to the industrial nature of Lee County.

LEE COUNTY
ANNUAL AVERAGE LABOR FORCE ESTIMATES 1970 - 1974⁶

	1974	1973	1972	1971	1970
Civilian Labor Force ¹	16,040	15,310	14,660	13,850	14,180
Unemployment, TOTAL	820	490	530	870	980
Rate of Unemployment	5.1	3.2	3.6	6.3	6.9
Employment, TOTAL	15,220	14,820	14,130	12,980	13,200
Agricultural Employment	620	680	690	650	700
Nonag. Wage & Salary Employ. ²	12,870	12,440	11,780	10,750	10,920
All Other Nonag. Employ.	1,730	1,700	1,660	1,580	1,580

INDUSTRY EMPLOYMENT BY PLACE OF WORK³

Manufacturing	7,230	6,530	6,170	5,410	5,750
Food	200	200	220	200	230
Textiles	1,660	1,460	1,250	1,020	870
Apparel	1,200	1,010	1,080	1,020	960
Lumber & Wood	140	150	130	200	230
Stone, Clay & Glass	330	320	360	360	380
Metals, Prim. & Fab.	320	260	220	210	100
Machinery, Nonelec. ⁴ & Elec.	1,990	1,820	1,640	1,790	2,250
Other Manufacturing	1,390	1,310	1,270	700	730
Nonmanufacturing	7,830	7,850	7,260	7,010	6,820
Construction	1,190	1,410	1,240	1,110	1,100
Trans., Comm., & P. Util.	550	480	440	450	430
Trade	2,700	2,760	2,550	2,360	2,260
Fin., Ins. & Real Estate	700	640	560	510	500
Service	950	920	890	1,050	1,040
Government	1,660	1,540	1,500	1,490	1,470
Other Nonmanufacturing ⁵	80	100	80	40	20

1. Data Based on Place of Residence.

2. Includes Nonagricultural Self-Employed Workers, Unpaid Family Workers, and Domestic Workers in Private Households.

3. Industry Segments are not Additive to the "Nonag. Wage & Salary Employ." Shown Under "Civilian Labor Force" Since Labor Force Data are by "Place of Residence."

4. Includes Tobacco; Furniture; Printing; Chemicals; Leather; and Trans. Equipment.

5. Includes Agricultural Services and Mining.

6. North Carolina Labor Force Estimates, November, 1975.

H. Income

During the selected years 1958, 1966 and 1970, Lee County ranked third, fifth and third respectively within Region J in regard to per capita income. The State and Lee County's per capita incomes were comparable for each selected year. This indicates that Lee County's per capita income trends deviates very little from that of the State.

Within per capita gross retail sales, Lee County ranked second among six counties in Region J. Again, this was reasonably comparable to that of the State.

The median family income in Lee County for 1970 was \$7,554, and the county ranked fourth in that category. This indicates that the county is neither the poorest nor richest county in Region J. It also indicates that living conditions are moderate for many of the residents in Lee County. (See Table 23).

Table 23

Region J and North Carolina Incomes³⁹

	Chatham	Durham	Johnston	Lee	Orange	Wake	State
Per Capita Income ¹ (1958)	\$1,281	\$1,699	\$1,058	\$1,337	\$1,102	\$1,698	\$1,431
(1966)	2,314	2,851	1,842	2,309	2,385	2,748	2,277
(1970)	2,815	3,544	2,699	3,290	3,076	3,634	3,208
Per Capita Gross Retail ² Sales 1970	2,324	2,504	2,043	2,607	1,827	3,516	2,489
Median Family Income ³	\$7,182	\$8,713	\$6,023	\$7,554	\$8,700	\$9,557	\$7,774

1. N. C. State Department of Revenue

2. N. C. State Budget Division

3. 1970 Census

39 North Carolina Region J Inventory and Atlas, April, 1974

I. Employment Forecast (30 years)

According to the North Carolina Labor Force Estimates (November, 1975), Lee County had a total of 14,180 persons in its civilian work force in 1970. The U. S. Department of Commerce, Bureau of Economic Analysis (April, 1976) indicated that Lee County will have 15,100 persons in its work force by 1980. They further predicted 17,400 by 1990 and 19,200 persons in the county's civilian work force by year 2000. From 1980 to 2000, it is expected that Lee County's civilian work force will increase by 5,020 persons. Such an increase will require more jobs. Therefore, the county should continue to recruit industry to provide jobs for its growing population.

Employment Forecast (30 years)

<u>Year</u>	<u>Civilian Work Force</u>	<u># Increase</u>
1970 41	14,180	---
1980 42	15,100	920
1990 42	17,400	2,300
2000 42	19,200	<u>1,800</u>
TOTAL		5,020

41 N. C. Labor Force Estimates, November, 1975

42 U. S. Department of Commerce, Bureau of Economic Analysis, April, 1976

VII. Goals, Objectives and Evaluation Criteria

The ensuing land development plan is not simply a map but rather a strategy for achieving the type of community that residents would prefer it to become. It includes recommendations on desirable arrangements and timing of land uses and also tells how to achieve these desirable patterns.

A. Land Development Goals

Land development goals in Lee County should be broad goals encompassing social, economic, and physical development.

These comprehensive goals, some referring specifically to land uses will be put forth as an initial framework.

1. ENCOURAGE DEVELOPMENT TO TAKE PLACE WHERE NATURAL CONDITIONS ARE SUITABLE FOR THAT TYPE OF DEVELOPMENT, AT DENSITIES COMPATIBLE WITH NATURAL CONDITIONS, AND DISCOURAGE DEVELOPMENT WHERE NATURAL CONDITIONS ARE UNSUITABLE (UNLESS MODIFICATIONS CAN BE REASONABLY MADE).
2. ENCOURAGE EFFICIENT USE OF LAND THROUGH COMPACT DEVELOPMENT REQUIRING A MINIMUM OF PUBLIC AND PRIVATE EXPENDITURES.
3. ENCOURAGE DEVELOPMENT TO TAKE PLACE IN SUCH A WAY THAT INCOMPATIBLE LAND USES AND TRAFFIC PROBLEMS ARE MINIMIZED.
4. ENCOURAGE EXPANSION OF THE HOUSING SUPPLY IN GOOD NEIGHBORHOOD ENVIRONMENTS TO MEET THE NEEDS OF ALL INCOME GROUPS.
5. PRESERVE SUFFICIENT SUITABLE LAND FOR EACH TYPE OF LAND USE.
6. PRESERVE LEE COUNTY'S HISTORICAL HERITAGE, BUT RENOVATE THOSE AREAS AND STRUCTURES WHICH HAVE DETERIORATED WITH TIME.

Having presented these broad goals, the next step is to develop annual objectives--quantifiable when possible--which, when achieved, will represent the steps taken to realize the goals.

B. Annual Objectives

1. PREPARE AND/OR AMEND ANY PREVIOUSLY ADOPTED LAND USE PLANS TO CONFORM WITH THE LAND DEVELOPMENT PLAN.
2. IN 1977, ADOPT A SET OF POLICIES AND A LAND USE PLAN WHICH ALLOCATES SUFFICIENT ACREAGE FOR EACH TYPE OF LAND USE, IN AREAS WHERE NATURAL CONDITIONS ARE SUITABLE, PUBLIC FACILITIES AND SERVICES CAN BE ECONOMICALLY PROVIDED, PREVIOUSLY EXISTING LAND USES ARE COMPATIBLE, AND, TO THE EXTENT POSSIBLE, THE BEST AGRICULTURAL LAND IS PRESERVED.

3. UPDATE POLICIES AND PLAN WHEN CHANGES IN CONDITIONS OCCUR.
4. DEVELOP AND IMPLEMENT THOSE PROGRAMS FOR WHICH A NEED IS FOUND DURING POLICY FORMULATION AND REVIEW.
5. REVIEW POLICIES AND PLAN AT LEAST ANNUALLY TO EVALUATE CHANGES IN CONDITIONS, AND REVISE POLICIES, PLAN, AND PROGRAMS WHERE NEEDED TO REFLECT CHANGES.
6. WORK CLOSELY WITH THE DEPARTMENT OF COMMUNITY DEVELOPMENT AS NEW PROJECTS ARE PROPOSED TO SEE THAT THEY ARE IN CONFORMANCE WITH THE OVERALL PLAN.
7. EXPAND THE PRESENT CODE ENFORCEMENT PROGRAM THROUGHOUT THE COUNTY TO UPGRADE THE QUALITY OF HOUSING WITHIN LEE COUNTY.

C. Evaluation Criteria

The development of goals and objectives is obviously a first step that must be taken prior to specific actions being proposed that will hopefully produce the desired result. But some mechanism must be developed to allow officials to assess the extent to which the objectives have been achieved. This is done through the establishment of evaluation criteria. The extent to which some of the following criterion questions can be answered affirmatively should give a strong indication that the implementing procedures are working effectively toward producing the desired result.

1. Was a land development plan presented to the governing officials and adopted in 1977?
2. Are these policies, plans, and programs being reviewed at least annually? Have changes been made when necessary?
3. Have the short-range decisions been consistent with the long range plans?
4. Are fewer developmental problems arising because of efforts to steer development to more suitable soil types?
5. Have revisions to the initial policies and programs been reviewed by affected local, regional, state, and federal agencies concerned with the natural and man-made environment? Were any objections suitably resolved?
6. Have housing conditions within Lee County improved since the last survey?
7. Is development taking place in locations, at intensities, and in sequence which can be economically provided with community facilities and services?

8. What steps have been taken to remedy any criticism pertaining to this plan?
9. Are citizens checking with the county government before undertaking development to ensure they are in compliance with land use regulations?
10. Do all offices and agencies involved in enforcing land use regulations understand their purpose and the procedures to be followed so that they can enforce them efficiently and fairly, or is some orientation or education needed?

VIII. Space Requirements

There are certain spatial requirements needed to determine the amount of land for different land uses in the years ahead. Areas that warrant future acreage requirements are new residential, commercial and industrial areas. Spatial needs for these land categories were derived from the section on Population and Economy and from the Employment Security Commission and the 1970 Census on Housing Characteristics.

A. Residential Space Needs

Tables 24 and 25 depict future residential acreage needed for Lee County. It is expected that 3,252 residential acres will be needed by 1985 and 5700 additional acres will be needed by 2000.

TABLE 24

RESIDENTIAL SPACE NEEDS BY TOWNSHIP: 1975 TO 1985

	1975			1985			D.U. / Acre	Res. Space Req't $7 \div 8$	F ^f	Res. Acres Allo- cated 9×10 (11)
	Total Pop. ^a (1)	Per/ D.U. ^b (2)	D.U.s $1 \div 2$ (3)	Total Pop. ^c (4)	Per/ D.U. ^d (5)	D.U.s $4 \div 5$ (6)				
Township										
Greenwood	2,530	3.12	811	2531	2.96	855	1	44	2	88
Jonesboro	6,485	2.98	2,176	7801	2.83	2,757	1.3	447	2	894
Cape Fear	1,906	3.01	633	1784	2.86	624	1	-	2	-
East Sanford	6,317	2.87	2,201	7215	2.73	2,643	1.3	340	2	680
West Sanford	11,468	2.91	3,941	13,405	2.76	4,857	1.3	705	2	1,410
Deep River	1,290	3.05	423	1280	2.90	441	1	18	2	36
Pocket	2,429	3.20	759	2526	3.04	831	1	72	2	144
Lee County	32,425	2.96	10,944	36,542		13,008		1,626	2	3,252

5.1 sq.mi.

a = From 201 study, mid point between 1970 population and 1980 projected population

b = 95% of 1970 figure for township population $\div$ twp dwelling units

c = 201 projection: mid point between 1980 and 1990 projected populations

d = 95% of 1975 figure (column 2)

f = Factor, to allow choice for vacancy rate and related uses, such as parks, schools, churches, fire station, etc.

TABLE 25

RESIDENTIAL SPACE NEEDS BY TOWNSHIP: 1975 TO 2000

Township	1975			2000			D.U. Gain 6-3	D.U./ Acre	Res. Space Req't $7 \div 8$	F* f	Res. Acres Allo- cated 9 x 10 (11)
	Total Pop. a	Per/ D.U. b	D.U.s $1 \div 2$	Total Pop. c	Per/ D.U. d	D.U.s $4 \div 5$					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Greenwood	2,530	3.12	811	2,563	2.81	912	101	1	101	2	202
Jonesboro	6,485	2.98	2,176	10,142	2.69	3,770	1,594	1.3	1,226	2	2,452
Cape Fear	1,906	3.01	633	1,723	2.72	633	0	1	0	2	0
East Sanford	6,317	2.87	2,201	8,627	2.59	3,331	1,130	1.3	869	2	1,738
West Sanford	11,468	2.91	3,941	17,120	2.62	6,534	2,593	1.3	1,995	2	3,990
Deep River	1,290	3.05	423	1,339	2.75	487	64	1	64	2	128
Pocket	2,429	3.20	759	2,831	2.89	980	221	1	221	2	442
Lee County	32,425	2.96	10,944	44,345		16,647	5,703		4,476	2	8,952

14.0 sq.mi.

a = From 201 study, mid point between 1970 population and 1980 projected population.

b = 95% of 1970 figure for township population $\div$ twp dwelling units

c = 201 projection

d = 95% of 1985 figure (which was 95% of 1975 figure)

f = Factor to allow choice for vacancy rate and related uses, such as parks, schools, churches, fire station, etc.

B. Commercial and Industrial Space Needs

Table 26 shows that Lee County will need 168 acres of commercial land by 1985. Industry will require 549 additional acres by 1985. By year 2000, commercial land will require an additional 330 acres and industrial land will require 501 additional acres.

TABLE 26

LEE COUNTY - SPACE NEEDS - 1985 TO 2000
COUNTYWIDE - COMMERCIAL AND INDUSTRIAL SPACE NEEDS

COMMERCIAL	1985	2000	1985-2000
(1) 1975 Employment (From ESC)	6690	6690	-
(2) Future Employment	7800	10,000	2200
(3) Employment Gain (2-1)	1110	3310	"
(4) Workers/acre	20	20	20
(5) New Acres Needed (3 ÷ 4)	56	166	110
(6) Choice Factor	3	3	3
(7) New Acres Allocated (5 x 6)	168	498	330

INDUSTRIAL	1985	2000	1985-2000
(1) 1975 Employment (From ESC)	7000	7000	-
(2) Future Employment	9200	11,200	2000
(3) Employment Gain (2-1)	2200	4,200	"
(4) Workers/acre	12	12	12
(5) New Acres Needed (3 ÷ 4)	183	350	167
(6) Choice Factor	3	3	3
(7) New Acres Allocated	549	1,050	501

IX. Land Use Policies and Standards

Having formulated a set of broad goals, annual objectives and evaluation criteria related to land use, and obtained a rough estimate of the amount of land needed in the future for the various types of land use, the next step is to enumerate a set of policies which will determine the specific location for each type of land use and the proper sequencing of development.

Location Policies

- A) Land Use Type: Higher density residential development
Intensity: 2-4 dwelling units per acre
Standard: Higher density residential development should take place in areas where water and sewer are available or can be economically provided, and neighboring land uses are compatible.

Time Frame: 1977-1980

Location Policy: Higher density residential development should continue to take place in existing residential areas. Development should occur in the northwestern sections of Sanford and Broadway or in the northwestern fringe areas beyond each town's one mile area.

Explanation of Policy: The areas mentioned, either have water or both water and sewer facilities. The land in these areas appear to be physically suited for residential development and can be characterized as gently sloping which is needed for adequate drainage.

Time Frame: 1980-2000

Location Policy: Higher density residential development should continue to take place: (1) through a filling-in of present partially vacant subdivisions already served by water and sewer or in areas where water is available and septic tanks perform properly; (2) in the Lemon Springs community, a 12" water line has been extended from Sanford to that community; (3) in the Carolina Trace community because of the availability of water and sewer; and (4) in the Northview community because water facilities have been extended from Sanford to that community.

Explanation of Policy: The areas mentioned are already served by either water or both water and sewer or could tap onto existing lines with a lift station, which might be made feasible if extension development were channeled to these areas. They are also located in the areas where residential development has occurred in the past.

Suggested Program to Implement these Policies: In 1977, zone the areas suitable for higher density residential development in the 1977-80 period either R-10 or R-20 depending on the character of the surrounding area.

Note Concerning Suggested Programs: The actual location of development depends only to some extent on zoning, and a community's policies concerning utility extension. Zoning can control the locations where certain kinds of development will not be allowed to take place, but in order for development to take place, there must be a demand for that type of development, and the property owners in the area must be willing to develop the property or sell to those who will at a price at which it will be profitable to develop. Otherwise, development will not occur.

B) Land Use Type: Low density residential development.

Intensity: 1 dwelling unit per acre.

Standard: In areas where sewer cannot be economically provided, or where environmental hazards exists residential development should occur a very low density.

Time Frame: 1977-2000

Location Policy: Rural areas northeast of Sanford have poor soils and are not suited for septic tanks. Therefore, low density development should be encouraged. The Coastal Plain area, located south of Sanford should have low density development because the soils are highly suited for agricultural use. For more information on this subject, refer to the Residential section under the Development Factor contained within this study.

Suggested Program to Implement these Policies: Zone the area proposed for low density development, R-40.

C) Land Use Type: Mobile Homes

Intensity: 4 mobile homes per acre

Standard: Sufficient acreage should be allocated for mobile home development. Such development should be provided with water and sewer.

Time Frame: 1977-2000

Location Policy: There are scattered mobile homes, clusters of mobile homes and few well designed mobile home parks in the county. Nevertheless, any future locations with reference to mobile home development must comply with Lee County's Mobile Home Park ordinance which was adopted during the latter part of 1976.

Explanation of Policy: Where mobile home developments are planned the town insist on well designed mobile home parks equipped with adequate water and sewer facilities.

Suggested Program to Implement these Policies: In 1977 zone any planned mobile home park R-MH. In future years, try to locate areas where mobile home parks could be constructed.

D) Land Use Type: Commercial and Services

Standard: Adequate land should be provided for commercial and service areas. These lands will be compatible with adjacent land uses and will not cause traffic congestion problems.

Time Frame: 1977-2000

Location Policy: Commercial and service lands will be located in the northern and northwest sections of the county where major highways and secondary road crossings are located. Some commercial land will be allowed to develop and/or expand throughout the county except that when is or will be traffic congestion problems.

Explanation of Policy: Long strips of commercial development along any major highway enhance traffic congestion problems. Therefore, this will be discouraged. Commercial and service areas will strive to prevent intrusion of incompatible uses such as residential development in a commercial setting.

Suggested Program to Implement these Policies: Zone the area in the northern section of the county C-1 and zone the area in the northwest section of the county C-2.

E) Land Use Type: Industrial

Time Frame: 1977-2000

Standard: Adequate amounts of land should be set aside for future industrial expansion and/or development. Future industrial locations should have rail and road access where possible and in areas of similar land uses. Where such developments are established, community facilities should be available.

Location Policy: Large portions of the north and northeastern sections of the county will be reserved for industrial development.

Explanation of Policy: The sections mentioned contain rail and road access. Some of the vacant tracts of land are large enough for locating industries without intrusion of noncompatible uses.

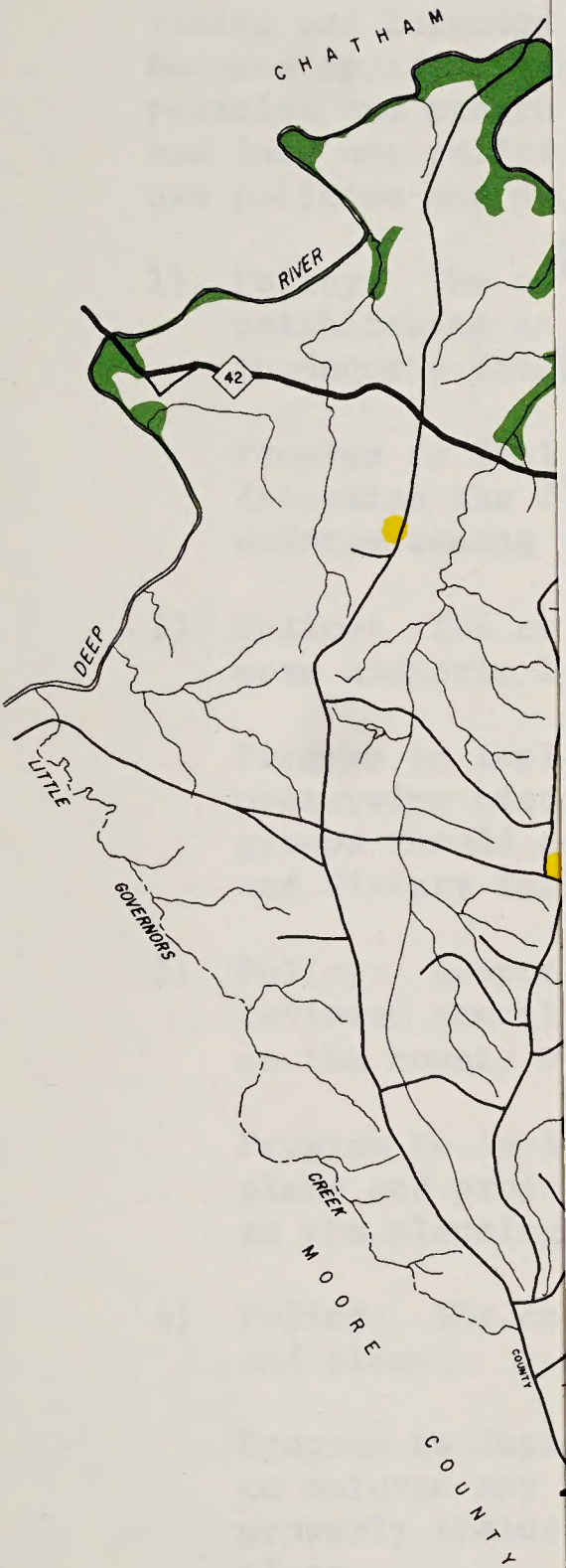
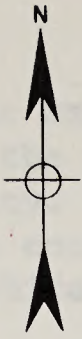
Suggested Program to Implement this Policy: Zone the areas mentioned I for industrial uses. Furthermore, indicate within the zoning ordinance certain criteria to apprehend problems with any adjacent residential areas.

X. PLAN FORMULATION

A. Land Development Plan

In the years ahead, development in Lee County will be urban in nature and Sanford will continue to serve as an urban center for the county and adjoining counties. Development will continue to expand west and northwest of Sanford, in the southeast near Broadway, and south in the vicinity of Tramway. Community facilities will need to be provided in these areas to accommodate population growth.

LEE COUNTY
NORTH CAROLINA



LAND DEVELOPMENT PLAN

LEE COUNTY, NORTH CAROLINA

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- OPEN SPACE & RECREATION
- UNDEVELOPED PLANNING AREA

D) Land Use Type: Commercial and Services

Standard: Adequate land should be provided for commercial and service areas. These lands will be compatible with adjacent land uses and will not cause traffic congestion problems.

Time Frame: 1977-2000

Location Policy: Commercial and service lands will be located in the northern and northwest sections of the county where major highways and secondary road crossings are located. Some commercial land will be allowed to develop and/or expand throughout the county except that when is or will be traffic congestion problems.

Explanation of Policy: Long strips of commercial development along any major highway enhance traffic congestion problems. Therefore, this will be discouraged. Commercial and service areas will strive to prevent intrusion of incompatible uses such as residential development in a commercial setting.

Suggested Program to Implement these Policies: Zone the area in the northern section of the county C-1 and zone the area in the northwest section of the county C-2.

E) Land Use Type: Industrial

Time Frame: 1977-2000

Standard: Adequate amounts of land should be set aside for future industrial expansion and/or development. Future industrial locations should have rail and road access where possible and in areas of similar land uses. Where such developments are established, community facilities should be available.

Location Policy: Large portions of the north and northeastern sections of the county will be reserved for industrial development.

Explanation of Policy: The sections mentioned contain rail and road access. Some of the vacant tracts of land are large enough for locating industries without intrusion of noncompatible uses.

Suggested Program to Implement this Policy: Zone the areas mentioned I for industrial uses. Furthermore, indicate within the zoning ordinance certain criteria to apprehend problems with any adjacent residential areas.

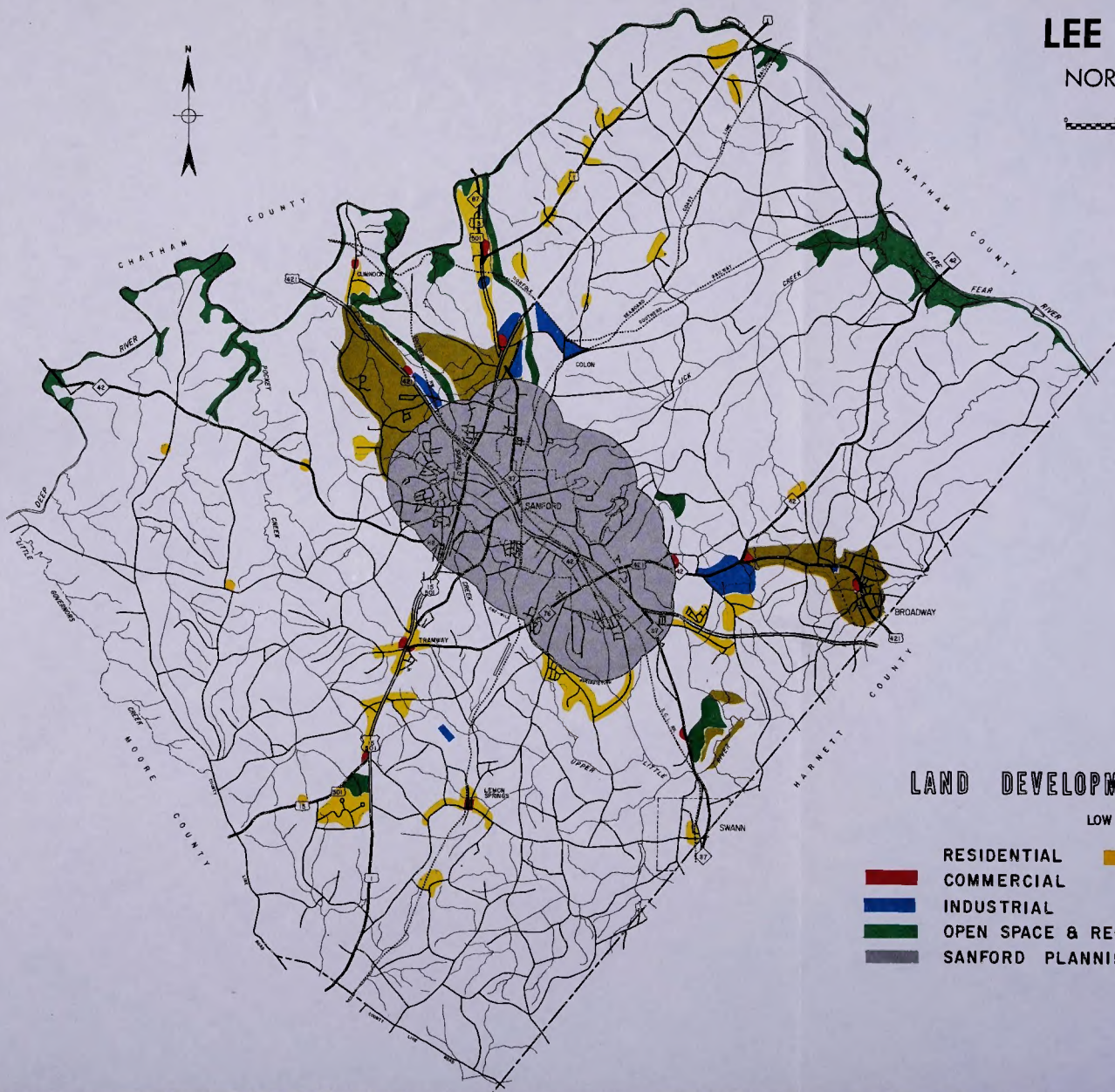
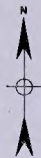
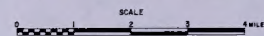
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LEE COUNTY

NORTH CAROLINA



LAND DEVELOPMENT PLAN

LOW DENSITY HIGH DENSITY

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- OPEN SPACE & RECREATION
- SANFORD PLANNING AREA

After examining the existing and potential land uses in the county, the next step is to present a land development plan for the county. The plan is geared to accommodate future land use needs in the county up to year 2000. Therefore, the following map depicts graphically, various land uses in Lee County.

B. Other Land Use Policies and Programs

Throughout this study, policies pertaining to intensity, timing and location of various land uses have been discussed. It becomes apparent that the county should adopt other land use policies and programs for reenforcement of its goals, objectives and land use policies mentioned earlier in this study. Other land use policies and programs are as follows:

- 1) Policy: The county will investigate the possibility of establishing zoning in the near future. This will prevent inadequate land use development.

Program to Implement Policy: After adequate investigation to determine the feasibility of zoning, the county will adopt and enforce zoning throughout the county.

- 2) Policy: The county will seek adequate resources for determining more historic land marks, buildings and archeological sites.

Program to Implement Policy: Formulate groups interested in preserving historic land marks and archeological sites. The groups should contact the North Carolina Department of Archives and History for proper guidance.

- 3) Policy: Adopted land use policies, plans and programs will be reviewed annually by the planning board and will be referred to the county commissioners for any amendments.

Program to Implement Policy: The county commissioners will refer plans and projects which relate to the county's land use policies to the planning board for review and comment.

- 4) Policy: The county will adequately enforce its land use policies and plans.

Program to Implement Policy: A land use officer will be designated to enforce any land use ordinances. That individual should be properly trained to enforce the county's land use policies and plans.

Explanation of Program to Implement Policy: The officer in charge of land use enforcement should seek guidance from the Institute of Government located in Chapel Hill, North Carolina.

North Carolina Land Classification System

The Land Policy Act of 1974 granted authority to the Land Policy Council to develop a land classification system for all local governments in the state as well as the state itself. This system is designed to promote orderly growth, development and conservation of land resources.

The system comprises five (5) land classifications and are as follows:

- 1) Developed. This land include existing areas which are supplied with a full range of public services. Developed areas usually comprise a density of 2000 people per square mile or an approaching density of 2000 people per square mile.

In Lee County, Sanford is the major developed area. The Town of Broadway is not developed because the town does not have a sewerage system. However, it is expected that the town will become developed by 1985.

- 2) Transition. The purpose of this class is for future urban development. It is expected that the transition areas will be supplied with public facilities within 10 years to accommodate future growth. Also, transition areas should have a population of 2000 persons per square mile within a 10 year period.

The south, southeast, east and northern sections of Sanford's fringe areas and the Town of Broadway are in the transition class and are expected to remain in this class until 1985. There are several areas that have been placed in the transition class until the year 2000. These areas are located between Sanford and Broadway along N.C. Highway 42, southeast of Sanford near US Highway 1-15-501, and north of Sanford near US Highways 421 and 1.

- 3) Community: Include existing cluster rural residential and commercial areas such as crossroads developments. These areas may require public water but public sewer should not be allowed.

There are numerous areas that are placed in the community class until 1985. These areas are scattered throughout the county. Also, there are a few areas in the county that will remain in the community class until the year 2000. These areas are located south and south-east of Sanford.

- 4) Conservation. The purpose of this class is to identify those areas which due to their significant, limited, or irreplaceable natural, recreational, or scenic resources need to be protected.

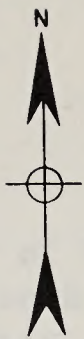
Eventhough much of the Deep and Cape Fear Rivers are subject to periodic flooding, they hold high potential for a wide range of recreational activities. Also, there are several historic sites located on the rivers. Therefore, the areas mentioned have been placed in the conservation class.

- 5) Rural. This class will identify those lands good for agriculture, forestry, mining and rural housing depending on private wells and septic tanks.

The rural class is the largest classification in the county. This class is primarily farmlands and woodlands.

In order to expedite time and eliminate future cost for preparing such a plan, the following map offers a graphical presentation of a land classification system for Lee County.

LEE COUNTY
NORTH CAROLINA

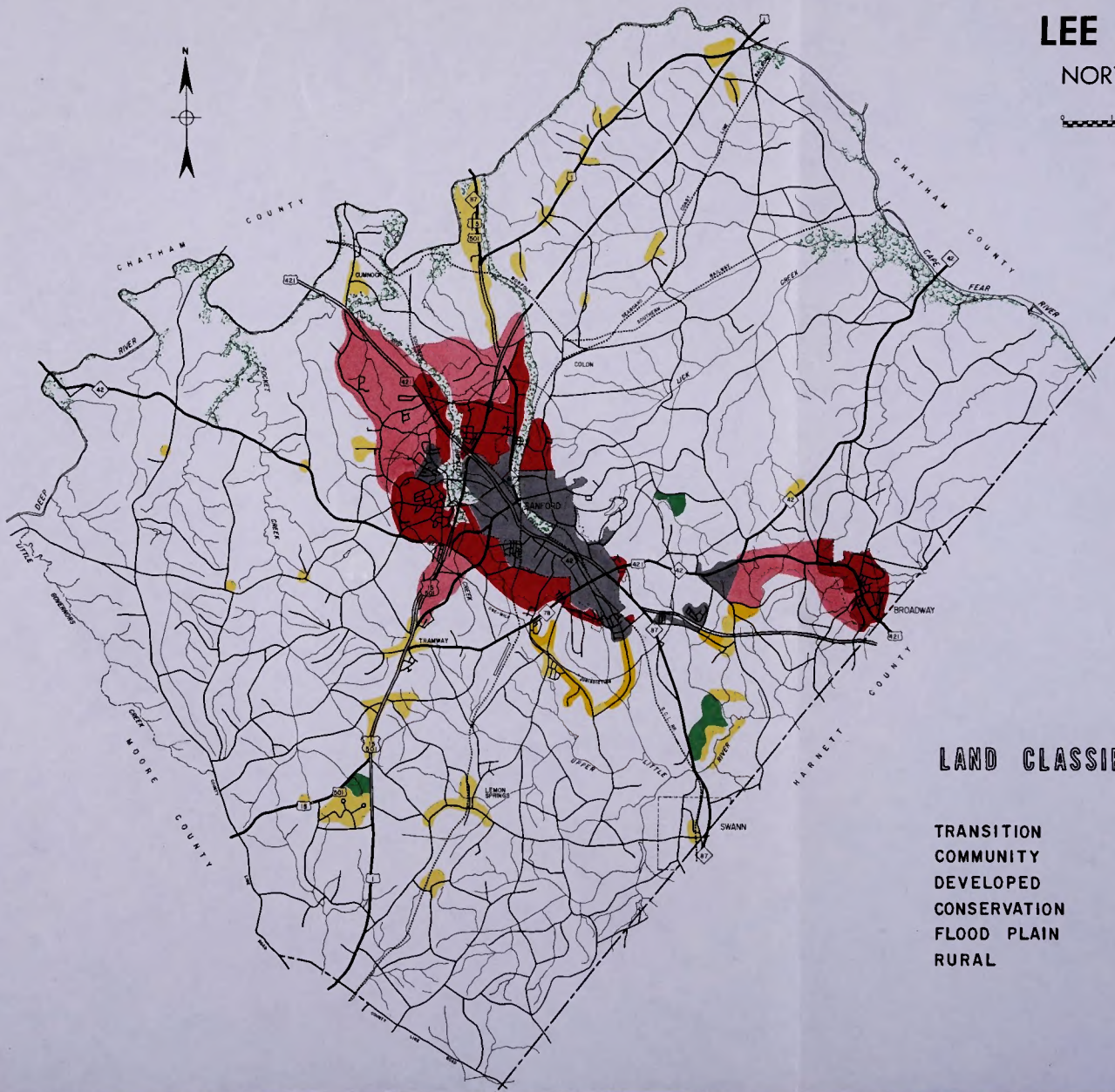
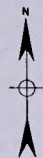
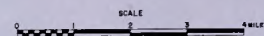


LAND CLASSIFICATION PLAN



LEE COUNTY

NORTH CAROLINA



LAND CLASSIFICATION PLAN

1985 2000

TRANSITION
COMMUNITY
DEVELOPED
CONSERVATION
FLOOD PLAIN
RURAL



ENVIRONMENTAL ASSESSMENT FOR LEE COUNTY'S
LAND DEVELOPMENT PLAN

- (1) Summary of Proposed Policies: Lee County's Land Development Plan discusses and proposes suitable locations for new residential, commercial, and industrial development, and the intensities and timing of this development. There are also implementation measures proposed, as well as policies dealing with regular review of the planning effort in Lee County.
- (2) Environmental Impact
 - Beneficial: More orderly use of land will be encouraged. Development will be encouraged to take place in such a manner that environmental problems and hazards are minimized.
 - Adverse: Any development will bring with it some environmental effects, such as an increase in runoff, areas previously in natural state converted to urban character with resultant loss of wildlife habitat. However, the policies and plan does not create development but seeks to channel it to suitable locations.
- (3) Adverse Environmental Effects Which Cannot be Avoided Should the Proposed Plan be Implemented: If development occurs, the adverse effects noted in (2) above will occur. However, the land use control measures proposed in the plan will mitigate some of these adverse effects to some extent.
- (4) Alternatives: The alternatives to the proposed policies would be (1) not to have policies to encourage development to take place in an orderly manner with consideration for the environment, an alternative which would have negative environmental effects; or (2) to encourage development of other types or in locations, at intensities or in a sequence other than that proposed. However, natural conditions such as soils, drainage and geology, and manmade conditions such as historic and possible archeological sites were considered in formulating the present policies. Therefore, it is unlikely that alternate policies would be more beneficial to the environment than the proposed policies.
- (5) Long-Term vs. Short-Term Productivity: These policies are long-term, rather than short-term in nature. Implementation of these policies would encourage orderly growth patterns which would contribute to the maintenance and enhancement of long-term productivity.

- (6) Irreversible and Irretrievable Commitments of Resources:
Development would lead to the irretrievable commitment of building materials and land. However, the policies and plan will not be the cause of development. Time of government officials, staff and citizens will be needed to implement the proposed policies and plan. This expenditure of resources will aid in the protection of the environment.

- (7) Applicable Federal, State or Local Controls:

201 Facility Plan

Lee County Health Department Regulations

National Flood Insurance Program

NEPA

SEPA

North Carolina Sedimentation Control Act

Building Inspection - County Enforcement

Lee County Mobile Home Park Ordinance

